

Course Name:

Ground-water contamination

Course Number:

20672

Credit:

3

Course Content (outline):

- Introduction to ground-water
- Ground-water hydrology
- Ground-water flow and well mechanics
- Sources and types of groundwater contamination
- Mass transport in saturated media
- Transformation, retardation, and attenuation of solutes
- Flow and mass transport in the vadose zone
- Multiphase Flow
- Numerical modeling of contaminant transport
- Ground-water and soil monitoring

References:

- “Contaminant Hydrogeology”, C.W. Fetter, 1993.
- “Ground water Contamination”, P.B. Bedient et al., 1999.
- “Quantitative Hydrogeology”, G. de Marsily, 1986,
- “Applied Hydrogeology”, C.W. Fetter, 1988.