

<b>7<sup>th</sup> Semester</b>	<b>REV7D001</b>	<b>Environmental System Modelling</b>	<b>L-T-P 3-0-0</b>	<b>3 Credits</b>
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**Module-I:** **(10 hours)**

Definition, Classification, examples and models of environmental systems, Purpose of modeling, Problem in modeling.

**Module-II:** **(10 hours)**

Introduction to air quality models, Air pollution meteorology, Atmospheric turbulence, Gaussian Plume model and modifications.

**Module-III:** **(10 hours)**

Simulation of special meteorological and topographic conditions. Air Pollution control models.

**Module-IV:** **(10 hours)**

Water quality and water resource management models. Dissolved oxygen and temperature in rivers solid waste generation models.

**Books:**

- [1] Principles of surface water quality modeling and control – R.V. Thomas and J.A. Muller – Harper int. Edn.
- [2] Fundamentals of air pollution – Richard W. Boubel, Donald L. Fox, D.Bruce Turner, Arthur C. Stera – Academic Press
- [3] Environmental Pollution – S.M. Khopkar