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| **Sl. No** | **Syllabus** | **Curriculum** | **Deployment Strategy and**  **Tool** | **Cross-cutting issues**  **integrated** | **PO, PSO and CO** | **Attainment Verification** |
| 1. | System Simulation & Modeling | 1. Models help the analyst to understand the functionality of the system; they are used to communicate with customers. Models can explain the system from different perspectives: A structural perspective, where you model the organization of a system or the structure of the data that is processed by the system 2. Systems modeling or system modeling is the interdisciplinary study of the use of models to conceptualize and construct systems in business and IT development. A common type of systems modeling is function modeling, with specific techniques such as the Functional Flow Block Diagram and IDEF0. 3. In business and IT development the term "systems modeling" has multiple meanings. It can relate to:  * the use of [model](https://en.wikipedia.org/wiki/Scientific_modeling) to conceptualize and construct systems * the [interdisciplinary study](https://en.wikipedia.org/wiki/Interdisciplinarity) of the use of these models * the systems modeling, [analysis](https://en.wikipedia.org/wiki/Systems_analysis), and [design](https://en.wikipedia.org/wiki/Systems_design) efforts * the systems modeling and [simulation](https://en.wikipedia.org/wiki/Simulation), such as [system dynamics](https://en.wikipedia.org/wiki/System_dynamics) * any specific systems [modeling language](https://en.wikipedia.org/wiki/Modeling_language) | 1. Chalk and   Talk method   1. PPT | * Business   Ethics   * Human   values | PO1:Engineering Knowledge  PO2:Problem Analysis  PO3:Design/Development Of Solutions  PO5:Modern Tool Usage  PO11:Project Management and Finance. |  |
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|  |  | PSO1:Professional Skills  PSO2:Problem Solving Skill |
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|  |  | **CO1** Understand the system concept and apply functional modeling method to model the activities of a static system;  **CO2** Understand the behavior of a dynamic system and create an analogous model for a dynamic system;  **CO3** Simulate the operation of a dynamic system and make improvement according to the simulation results. |
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