ICT 4103: Simulation and Modeling

WEEK I - XII

Course Completion Helps

Ziaur Rahman, PhD | Systems Security Lab
Department of Information and Communication Technology (ICT), MBSTU

SSL
Systems Security Lab

Learning Management System (LMS):

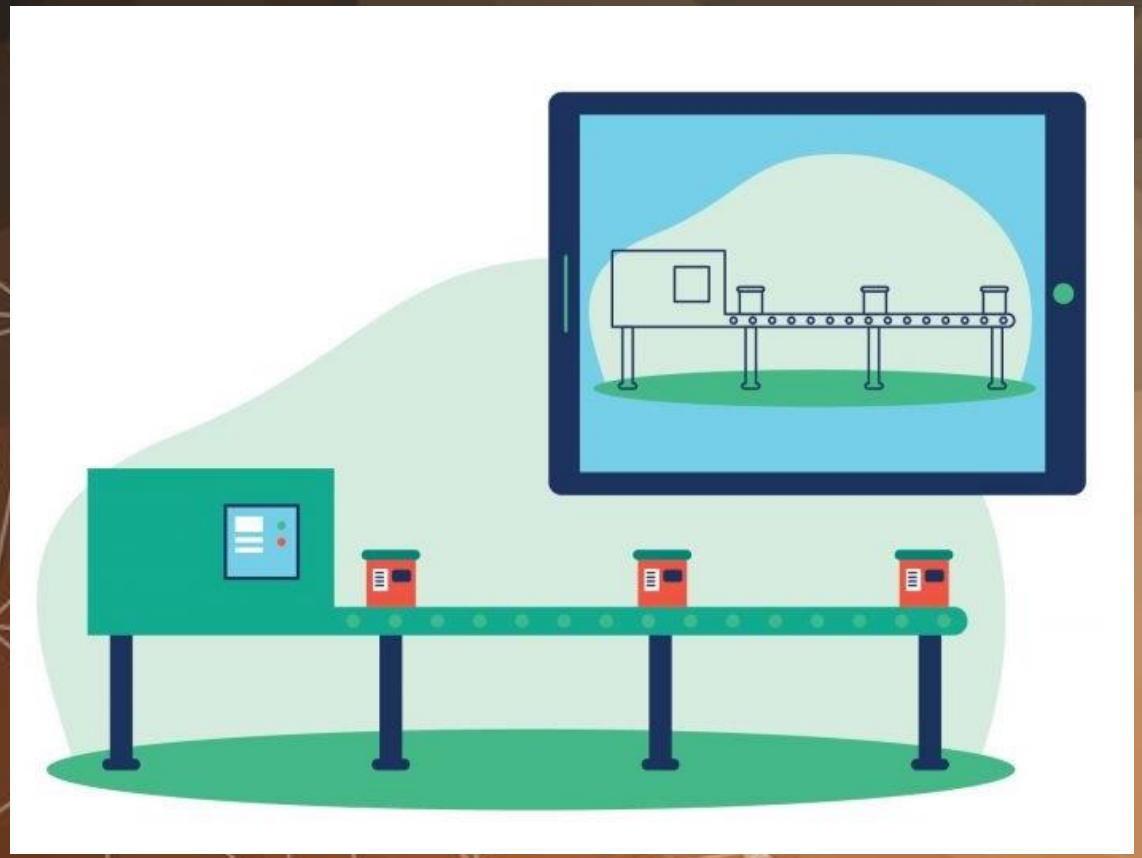
Google Classroom

5 May 2024, Tangail-1902

Course Outlines

1. Introduction To Modeling and Simulation (1-2L)
2. Random Number & Monte Carlo Method (3-6L)
3. Statistics for Modelling and Simulation (7-10L)
4. Statistical Distributions (11-14L)
5. Probability Distributions (15-18L)
6. Modelling Methods (19-21L)
7. Queuing Models and Experiments (22-25L)
8. Simulation Software (26-28L)
9. Data Coding and Screening (29-30L)

Total = 42 (30 Lects. + 4 Class Tests/Quiz + 8 Review Lects.)



Introduction To Modeling and Simulation

ICT 4103 – Simulation and Modeling
Department of Information and Communication Technology (ICT), MBSTU

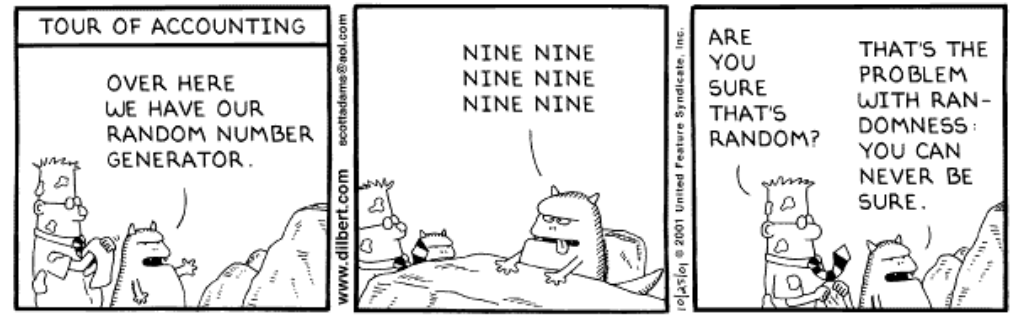
SSL
Systems Security Lab

1: Introduction To Modeling & Simulation

1) Modelling and Simulation Concepts
2) Definitions and What is Modelling and Simulation?
3) Types of Models
4) Advantages and Disadvantages of Simulation
5) Advantages of Using Models
6) Systems and System Environment
7) Components of a System
8) Discrete and Continuous Systems
9) Areas of Application
10) Modelling Procedure (Steps with Fig)

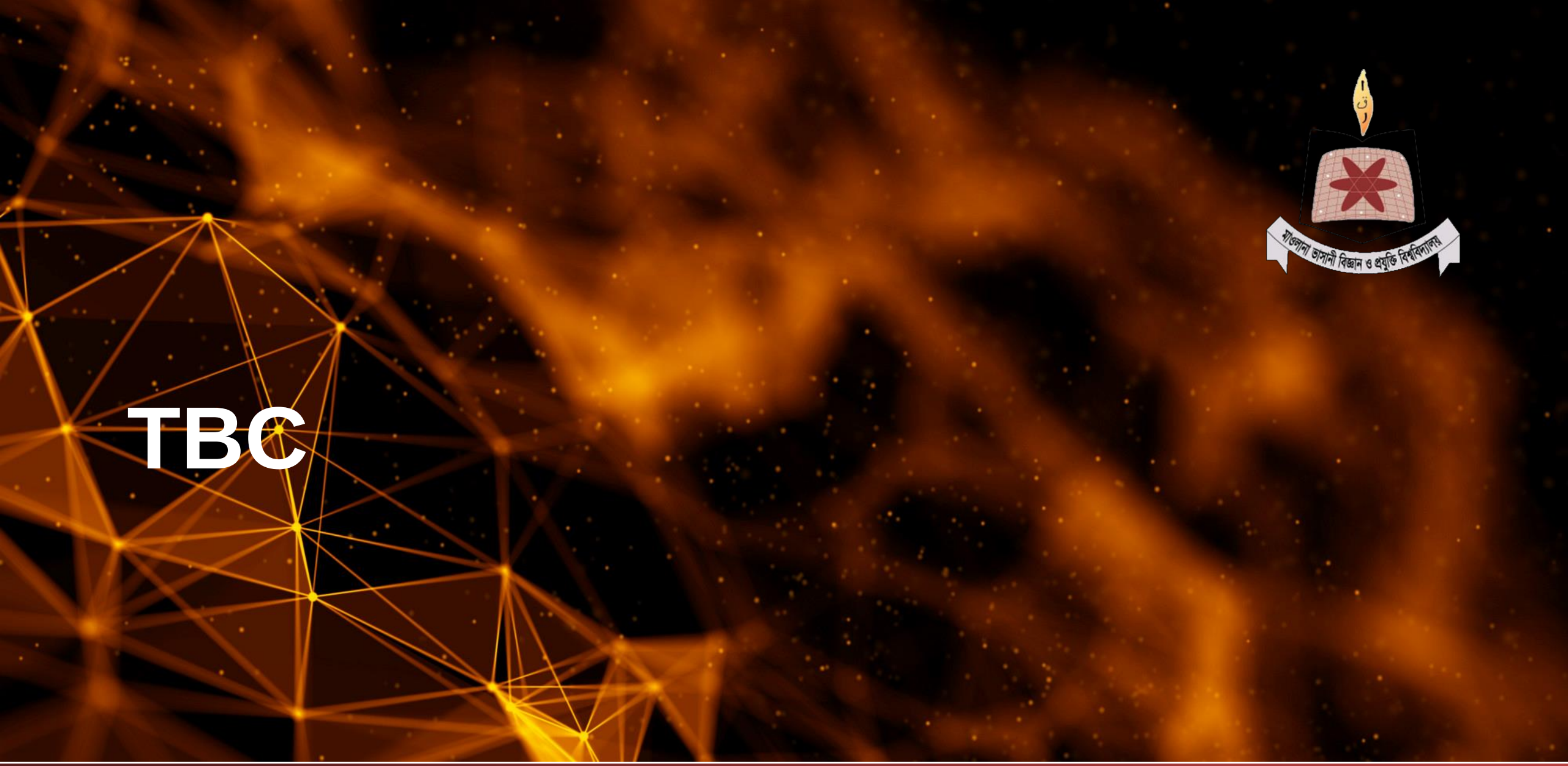
2: Random Number

1) Preliminaries: Modular Arithmatic Basics
2) Properties Of Random Numbers
3) Techniques For Generating Random Numbers
4) Linear Congruential Method



Copyright © 2001 United Feature Syndicate, Inc.

Credit: Tesla Digital Assets


TBC

QUESTION?