DO NOT TYPE IN THIS BOX

Bulletin # : _____

Academic Year : _____

FLORIDA INTERNATIONAL UNIVERSITY
UNIVERSITY CURRICULUM COMMITTEE
Proposal for a New Course

1. **School/College** Engineering and Computing

   Div./Dept. in Which Taught School of Computing and Information Sciences

2. | Alpha Prefix | 1st Digit | Last 3 Digits | "C"-lec-lab "L"-Lab | Cr. Hrs. |
   |---|---|---|---|---|
   | CEN | 4 | | | 3 |

   CIP Code ***(Leave this blank):*** _____

3. **Grading Method (select one):** ☒ Graded ☐ Pass/Fail

4a. **Course Title** Fundamentals of Modeling & Simulations

b. **Abbreviated course Title** ***(for computer class schedules, transcripts)*** Modeling & Simulations

LIMITED TO 25 Characters *(including spaces)*

5. **Statewide Course Numbering Subject Matter Area** Computer Software Engineering

6. **Catalog Description/Major Topics** *(not to exceed 200 characters including spaces)*

College of Medicine and College of Law: Attach description not exceeding 1,000 characters including spaces.

Introduction to discrete-event systems, a survey of modeling tools, mathematical & statistical modeling, role of random numbers, verification & validation, and applications.

7. **Attach detailed syllabus course outline and course justification on separate page(s).**
8. **Prerequisite(s):** (STA-2023 or STA-3033) and COP-3530
9. **Corequisite(s):** _____
10. **Objective(s) of Course:**

Student will understand:
What are the advantages and disadvantages of different types of simulations.
The role of statistics and queues in modeling.
The role of verification and validation in modeling

11. **Does this course duplicate/overlap other courses at FIU?** ☒ No ☐ Yes
    If yes, please explain: _____
12. **What other closely related department(s) have been consulted about this course?**

    _____
13. **Is this course used for the assessment of a program or a certificate (if yes, then send a notification to assessment@fiu.edu)? No Yes**

PROPOSAL REQUESTED BY:

Faculty Contact William B Feild, Jr — 3 / 16 / 20 20
(Type name) **(Signature)**
wfeildjr@fiu.edu — 305 348-8034
(Email address) **(Phone number)**

Chairperson (Dept./Div.) S.S. Iyengar — 3 / 16 / 20 20
(Type name) **(Signature)**

Chairperson (Curr. Comm.) Wei-Chiang Lin — / / 20 20
(Type name) **(Signature)**

College/School Dean John Volakis — / / 20 20
(Type name) **(Signature)**

Submit one original form. Attach one copy of the course justification and course syllabus, course description, objectives, major topics and textbooks.