DO NOT TYPE IN THIS BOX
Bulletin # : _____
Academic Year : _____

FLORIDA INTERNATIONAL UNIVERSITY
UNIVERSITY CURRICULUM COMMITTEE
Proposal for a New Course

1. **School/College** Click to select

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

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

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

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

4a. **Course Title** Fundamentals of Quantum Computing

b. **Abbreviated course Title** ***(for computer class schedules, transcripts)*** Fund of Quantum Computing

LIMITED TO 25 Characters *(including spaces)*

5. **Statewide Course Numbering Subject Matter Area** Computing Theory

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.

This course introduces basic concepts in quantum theory, applications of quantum computing, and a review of quantum algorithms.

7. **Attach detailed syllabus course outline and course justification on separate page(s).**
8. **Prerequisite(s):** (COP 3337 or COP 3804) and (COT 3100 or MAD 1100 or MAD 2104)
9. **Corequisite(s):** _____
10. **Objective(s) of Course:**

Describe quantum mechanics concepts
Explain and apply linear algebra operations
Discuss quantum computer systems
Analyze quantum application software
Design and evaluate quantum programs

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?**

Department of Electrical and Computer Engineering

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 Nagarajan Prabkar _____ / _____ / **20**22
(Type name) **(Signature)**

prabakar@fiu.edu 305-348-2033
(Email address) **(Phone number)**

Chairperson (Dept./Div.) Jason Liu _____ / _____ / **20**22
(Type name) **(Signature)**

Chairperson (Curr. Comm.) _____ / _____ / **20**22
(Type name) **(Signature)**

College/School Dean John Volakis _____ / _____ / **20**22
(Type name) **(Signature)**

Submit one original form. Attach one copy of the course justification and a draft of the course syllabus for this New Course Proposal. The syllabus should include the course description, objectives, learning outcomes, major topics, and textbooks.