Instructions

This New Course form will enable you to propose a new course. To initiate this proposal, you will need to provide information regarding:

- Justification for New Course
- College/ School
- Department
- Career (Undergraduate, Graduate, Law, or Medicine)
- Course Prefix
- Course Level (1000, 2000, 3000, etc.)
- Course Designation (Laboratory, Combined, or N/A)
- Course Title (Long and Abbreviated)
- Course Description
- Global Learning designation (if applicable)
- Grading method
- Effective Term
- Syllabus
- Number of credit hours
- Course prerequisites and corequisites

The Course Review Subcommittee, a standing committee of the University Curriculum Committee, will review this course proposal and recommend approval to the FIU Faculty Senate. The members that comprise these governing bodies may not understand the nuances of your department or academic discipline. Therefore, you will be required to provide a justification for explaining the need for this new course. The Course Review Subcommittee requests that justifications be specific and written for an audience that is unfamiliar with your department and program. You will also be required to attach a syllabus for the course you are proposing. Required criteria for the syllabus are provided at the end of this form.

Bulletin

Bulletin number

-

Justification for New Course

Please provide a justification explaining the need for the proposed new course.
The course is required to address the combination of two areas consisting of AI and Quantum computing. The primary objective of this course is to equip students with a strong theoretical and practical foundation in Quantum Artificial Intelligence (QAI), with a specific emphasis on its transformative potential across multiple domains.

Course Information

College/School
CENGR - College of Engineering & Comp

Department(s)
Electrical & Computer Engineering/CENGR

Career
Graduate

Course Prefix
CAI

Course Level
Level - 6XXX

Course Designation
N/A - This course will not have a designation.

Abbreviated Course Title (appears on transcript)
Adv Quantum AI

Begin typing the abbreviated course title for the proposed course. Abbreviated titles are shown on student transcripts. Please keep abbreviated titles intelligible to a general audience.

Course Description
This course covers quantum computing, QML models, QNNs, QGANs, hybrid architectures, and hands-on circuit building for ECE applicatio

Global Learning Designation
No

Grading Method
GRD - Graded

Split Ownership - Registrar View only
No

Department Owners - Registrar View only
-

Effective Term

Status - Registrar View only
Active

New courses become effective in Fall of the next academic year. If this course requires a different effective date, for example Spring of the next academic year, please provide a justification in the box.

The course approval process takes several months and concludes when the Florida Department of Education's State Course Numbering System assigns a final course number, typically two semesters from the time the proposal is submitted.

Effective Term Justification (if not Fall of next year)
-

Administrative Course Detail

Peoplesoft Course ID
-

Course Offer Number - Registrar View only
1

Catalog Number - Registrar View only
-

Exam Only Course - Registrar View only
No

Equivalent Course Group - Registrar View only
-

Catalog Print
Yes

Print Instructor In Schedule
Yes

Requirement Designation - Registrar View only
-

Course Fees Exist
No

Last Course of Multi Term Sequence
No

HEGIS Code
-

Allow Integration Sync To SIS - Registrar View
Yes

Course Enrollment Details

Instructor Edit
No Choice

GL Interface Required
No

Dynamic Class Date Rule
-

Tuition Group
-

OEE Enrollment
No

OEE Dynamic Date Rule
No

Requirement Group - Registrar View only
undefined - undefined

Credit Hours

Units

Min Units:
3

Max Units:
3

Value:
-

Operator:
-

Course Count:
1

Repeat for Credit:
No

Number of Repeats:
-

Total Units Allowed - Registrar View:
-

Prerequisite(s) and Corequisite(s)

Instructions
To denote prerequisite(s) or corequisite(s), use the "Embed Course Link" (book icon) in the toolbar above each box. Click the icon. Then, search using the prefix and number of the course you wish to add. Then click "Embed Link".

If there are no prerequisite(s) or corequisite(s), please type "N/A" in each text box.

Prerequisite(s)
CNT 6154 Advanced Machine Learning in ECE

Corequisite(s)
None

Additional Information

Does the course content represent an area of expertise or topic typically taught by another Department/School?
Yes

If so, please explain...
The areas of AI and Quantum and their combination can generally be taught in other departments, mainly Computer Science

What department(s) were consulted about this course?
Computer Science was consulted about the course and did not disapproved of it being developed.

Please upload documentation of this communication (memo, email, etc.)
Jason-AIQuantum.docx

Will this course be used for the assessment of a program or a certificate? (Checking Yes will automatically notify assessment.fiu.edu)
No