

# 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)
- Experimental Course
- 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.

# Justification for New Course

Please provide a justification explaining the need for the proposed new course.

CIS 4433 Cloud DevOps

## Course Justification

Cloud Computing has become the norm rather than the exception in terms of how major corporations host their IT infrastructure. It is estimated that well over 90% of companies use cloud computing services, and almost all have plans for continued expansion. The global Cloud Computing market size is now over \$500 billion annually, with estimates putting it over \$1 Trillion annually within 5 years. In addition, the move to the cloud has accelerated the automation of both code and infrastructure deployments. Continuous Integration and Continuous Deployment (CI/CD) pipelines are fundamental to the Agile and DevOps practices that are becoming the norm in modern IT departments. Most IT professionals will need to be familiar with these concepts to continue working in the industry. Thus, new graduates, particularly those in the IT program, should acquire these Cloud Computing and CI/CD automation skills while in FIU to make them more marketable once they graduate. Creating a course focused on the hands-on deployment of complex cloud technologies with CI/CD pipeline automation would be a tremendous benefit to our students.

The intent of this course is to help the student fully understand the rationale for the DevOps application development practice, as well as acquire skills to create and maintain CI/CD pipelines including the creation of cloud computing resources. This will include learning how to use tools that simplify the creation of cloud resources, how to automate the testing of applications, how to create approval gates and finally how to automatically deploy code to various environments (e.g., dev, test, production).

## Course Information

### College/School

CENGR - College of Engineering & Comp

### Department(s)

Knight Foundation School of Comptg & Info Sciences

### Career

Undergraduate

### Will this be an Experimental Course?

No

---

**Course Prefix**

CIS

**Course Level**

Level - 4XXX

**Course Designation**

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

**Long Course Title**

Cloud DevOps

---

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**

Prepares students for DevOps engineering role including automated creation of cloud infrastructure as well as building, testing and deployment of code to cloud.

**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

**Effective Start Term**

Fall

## 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

-

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 corequisites(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)

(CIS 3080 or CEN 4083) and CGS 4854

### Corequisite(s)

N/A

## Additional Information

Does this course duplicate/overlap other courses at FIU?

No

If so, please explain...

-

What department(s) were consulted about this course?

-

Please upload documentation of this communication (memo, email, etc.)

-

**Will this course be used for the assessment of a program or a certificate? (Checking Yes will automatically notify assessment.fiu.edu)**

No