

Object Oriented Programming

Lab 6

Task 1:

- ◆ Creating a Python program to model a university course registration system:

Code:



```

class Course:
    def __init__(self, course_code, course_name):
        self.course_code = course_code
        self.course_name = course_name

    def display_info(self):
        print(f"Course Code: {self.course_code}, Course Name: {self.course_name}")

class UndergraduateCourse(Course):
    def __init__(self, course_code, course_name, year_level):
        super().__init__(course_code, course_name)
        self.year_level = year_level

    def additional_info(self):
        print(f"Year Level: {self.year_level}")

class GraduateCourse(Course):
    def __init__(self, course_code, course_name, research_area):
        super().__init__(course_code, course_name)
        self.research_area = research_area

    def additional_info(self):
        print(f"Research Area: {self.research_area}")

def register_course():
    course_type = input("Enter course type (Undergraduate/Graduate): ").strip().lower()

    course_code = input("Enter course code: ")
    course_name = input("Enter course name: ")

    if course_type == "undergraduate":
        year_level = input("Enter year level: ")
        course = UndergraduateCourse(course_code, course_name, year_level)
    elif course_type == "graduate":
        research_area = input("Enter research area: ")
        course = GraduateCourse(course_code, course_name, research_area)
    else:
        print("Invalid course type. Please enter 'Undergraduate' or 'Graduate'.")
        return

    course.display_info()
    course.additional_info()

if __name__ == "__main__":
    print("Welcome to the University Course Registration System!")
    register_course()

```

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Welcome to the University Course Registration System!
Enter course type (Undergraduate/Graduate): Undergraduate
Enter course code: SU92
Enter course name: BS-Artificial Intelligence
Enter year level: 1
Course Code: SU92, Course Name: BS-Artificial Intelligence
Year Level: 1

```