



ITSE 1391-101H3

Computer Programming (UiPath Robotic Process Automation (RPA))

Course Semester (Fall 2024) 8/19/2024 – 12/05/2024

Monday and Wednesday, 11:00 am – 12:20 pm, STEAM classroom S1.146

Instructor Information:

Name: Faith (Fay) Alexander

Email: Email: fbryan@com.edu

Phone: Office phone: 409-933-8334, if no answer, leave a message for a callback

Office Location: STEAM 225.55

Student/Office hours in the classroom, S1.146, S1.152 or STEAM 225.55 (office)

First 8 weeks (8/19 – 10/10)

Monday, 9:00 – 9:30 pm, 12:30 – 1:00

Tuesday, 9:00 – 12:00 pm

Wednesday, 9:00 – 9:30 pm, 12:30 – 1:00

Thursday, 9:00 – 12:00 pm

Second 8 weeks (10/14 – 12/05)

Monday, 9:00 – 11:00 am

Tuesday, 9:00 – 11:00 am

Wednesday, 9:00 – 11:00 am

Thursday, 9:00 – 11:00 am

Other days and times are by appointment with the instructor.

Required Textbook:

There is no required textbook. Learning materials are on UiPath.com and on D2L.

Course Description:

This course offers comprehensive knowledge and professional-level skills focused on developing and deploying software robots. The course assumes no prior knowledge of RPA. It starts with the basic concepts of Robotic Process Automation. It further builds on these concepts and introduces key RPA Design and Development strategies and methodologies, specifically in the context of UiPath products. A student undergoing the course shall develop the competence to design and develop a robot for a defined process.

Course Requirements:

UiPath Studio software is required for this course. This software is installed in all computers in the classroom. Students may also install the software on their home computer. UiPath Studio works only on Windows computers, not on a Macintosh computer.

Grading Formula:

The grade is determined by the completion of the UiPath assignments and quizzes.

COURSE ITEM	% of Total Grade
UiPath Assignments	50%
UiPath Quizzes (Check Your Knowledge – UiPath online)	50%
Total	100%

Grading Scale:

Letter Grade	Percent
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	Below 60%

Late Work, Make-Up, and Extra-Credit Policy:

All assignments must be completed according to the deadline date. Late work will not be accepted. Contact the instructor if you have any issues. There is no extra credit in this course.

Attendance Policy:

All students are expected to attend all sessions in the classroom. There are no recordings of lectures and labs. If you cannot attend a class, you are still responsible for that content. Please contact a classmate to find out what you missed, and be sure to meet all deadlines, as they will not be extended. You may also meet with the instructor during student/office hours.

Computer and Internet access: Regarding problems with your own computer and with Internet access, COM is not responsible for outages, and due dates will not be extended.

Cell Phone Usage: Cell phone usage is not allowed during class.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

Student Learner Outcome	Maps to Core Objective	Assessed by Assignment(s)
Describe the details of the Studio-Robot-Orchestrator Platform	Critical thinking	"Check Your Knowledge" Quiz online in the module "Introducing the Studio-Robot-Orchestrator ecosystem"
Create and use variables, constants and arguments in UiPath workflows	Critical thinking	"Check Your Knowledge" Quiz online in the module "Variables, Arguments and Data Types:

Student Learner Outcome	Maps to Core Objective	Assessed by Assignment(s)
Demonstrate " While and If" activities in UiPath workflows.	Critical thinking Quantitative Skills	Successfully complete the Practice 2 Assignment in the module "Control Flow in Studio"

Academic Dishonesty:

Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a grade of zero on that exam and the student will be referred to the department chairperson and the Office of Student Life for the appropriate disciplinary action.

Student Concerns:

If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Mr. Leslie Richardson, Math and Computer Science Department Chair, at 409-933-8329, email lrichardson@com.edu.

Updates to this Syllabus:

The instructor reserves the right to update this syllabus. All substantive changes will be communicated to students as soon as possible, in the classroom and through COM email.

Course Outline

Week	Date	Topic
1	8/19 – 8/21	Set up UiPath Studio / StudioX Automation Explorer Explore Automation Development with UiPath Studio, Automation Cloud Create new process, publish to Orchestrator run with Assistant
2	8/26 – 8/28	"Build Your First Process with Studio" Lesson 4: Excel Consolidation Part 1 Lesson 5: Excel Consolidation Part 2 Lesson 6: Publishing and running the process "Check Your Understanding" Quiz
3	9/4	Variables, Constants and Arguments in Studio Lesson 3: Configuring variables. Training video. Lesson 4: Practice 1—Managing Variables. Workflow assignment. Lesson 5: Data Types – Conversion Methods Lesson 6: Invoke workflow file (multiple workflows) and passing arguments. Training Video.
4	9/9 – 9/11	Variables, Constants, Arguments, Arrays (Continued) Lesson 7: Practice 2: Using the Invoke Workflow File. Assignment. Lesson 8: Global constants and variables. Training video. Lesson 9: Array variables, Collections. Training Video. Lesson 10: Using Array Variables. Assignment. Quiz: Check your Knowledge

Week	Date	Topic
5	9/16 – 9/18	Control Flow in Studio Lesson 3: Do While, If, Else if, For each, Switch, Sequences, Flow Charts "Check Your Knowledge" Quiz Lesson 4: The If Statement – Training video. Lesson 5: Loops: Do while, While, For each – Two Training videos Quiz: Check Your Knowledge
6	9/23 – 9/25	Control Flow (Continued) Lesson 6: Practice 1: For Each and If Lesson 7: While and If, Guess the Number Lesson 8: Switch –Training Video Lesson 9: Practice 3: Switch and For Each Quiz: Check Your Knowledge
7	9/30 – 10/2	Excel Automation with the Modern Experience Introduction to Excel Automation Lesson 3: Training (no video) Quiz: Check Your Knowledge Lesson 4: Design Experiences (Modern and Classic) Excel Add-In Lesson 5: Build Automation using Workbook and Data Tables Data Tables and Excel - Training Video
8	10/7 – 10/9	Excel Automation (continued) Lesson 6: Practice 1 – Workbook and Data Tables Lesson 7: Build Automation Using Excel Modern Activities. 2 training Videos Lesson 8: Practice 2: Excel Activities Lesson 9: Quiz "Check Your Understanding" Lesson 10: Marketplace – Various projects provided to study (choose)
9	10/14 – 10/16	User Interface (UI) with Modern Design in Studio Lesson 2: Overview of How UI Automation Works Quiz: Check your Understanding Lesson 3: Key concepts UI Automation Activities Activity Properties Targeting methods Input and output methods Recorders Extraction Wizard The object repository AI Computer Vision Quiz on Key Concepts Lesson 4: Design Experience and Installing UiPath Extensions Lesson 5: Indicating the UI element Targeting methods – Training Video Quiz: Check Your Knowledge

Week	Date	Topic
10	10/21 – 10/23	Lesson 6: Introduction to Activities, Activity Properties and Input Methods UI Automation Activities UI Automation Properties UI Automation Input methods Quiz: Check Your Knowledge Lesson 7: Using Input activities and Input methods Part 1 Part 1 – Use Application Browser – Training Video Quiz: Check Your Knowledge for Lesson 7 Lesson 12: Practice 1 – Build and run UI Automation Project Lesson 13: Using App/Web Recorder – Training Video Check Your Knowledge for Lesson 13 Lesson 14: Using Table Extraction – Training Video Google Search Table Extraction Lesson 15: Practice 2: Table Extraction Quiz: Test Your Knowledge
11	10/28 – 10/30	UI with Modern Design (Continued) Lesson 8 – Foreground and Background Processes Quiz: Check Your Knowledge for Lesson 8 Lesson 9: Using Input Activities and Input Methods Part 2 Type Into, Click, Select Item, Check/Uncheck, Hover, Navigate Browser, Keyboard shortcuts Quiz: Check Your Knowledge for Parts 1 and 2 Lesson 10: Introduction to Output Methods Full Text, Native, OCR Quiz: Check Your Knowledge, Lesson 10 Lesson 11: Using Output Activities and Output Methods, Part 3- Training Video Check Your Knowledge Lesson 11
12	11/4 – 11/6	Lesson 12: Practice 1 – Build and run UI Automation Project Lesson 13: Using App/Web Recorder – Training Video Check Your Knowledge for Lesson 13 Lesson 14: Using Table Extraction – Training Video Google Search Table Extraction Lesson 15: Practice 2: Table Extraction Quiz: Test Your Knowledge Assessment: Automation Explorer
13	11/11 – 11/13	Automation Developer Associate Lesson 3: Data Manipulation Lesson 4: Data Manipulation with Strings in Studio String Methods and Properties – Training Video Lesson 5: Practice 1 – Extract email address using string methods
14	11/18 – 11/20	Data Manipulation (continued) Lesson 6: Regex Builder Wizard – Training Video Lesson 7: Practice 2 – Extract email Address with Regex Lesson 8: String activities – Training video Lesson 9: Practice 2 – String manipulation using string activities. Quiz: Check Your Understanding

Week	Date	Topic
15	11/25 – 11/27	Introduction to Logging Access and Reading robot execution logs Logging Best Practices Add log messages Check Your Knowledg
16	12/2 – 12/4	Orchestrator Overview Tenants and Folders Provision an Unattended Robot Check your understanding

Institutional Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 2. The last date to withdraw from the 16-week session is November 15. The last date to withdraw for the 2nd 8-week session is November 26.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The

issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.