

S. No.	Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
								Sessional	Final Exam	Total
7	COM-212	Business Process Automation with RPA Lab	ESC	2	0	0	4	50	-	50

### Course Outcomes:

At the end of the course the student will be able to: -	
CO1	Develop RPA bots for performing simple business processes using UiPath Studio.
CO2	Design RPA bots to automate data collection from multiple web sources.
CO3	Develop competencies in designing RPA bots for manipulating data across documents.
CO4	Manage the developed UiPath RPA robots using UiPath Orchestrator.
CO5	Troubleshoot problems in existing RPA bots.

### List of Activities in Lab

S. No.	Activity
1	Familiarity with UiPath Studio Academic Alliance Edition: <ul style="list-style-type: none"> <li>Configure UiPath Academic Alliance Edition.</li> <li>Design a bot that prints "Hello World" on the screen.</li> <li>Design a bot to generate mathematical tables.</li> </ul>
2	Designing basic RPA bots: <ul style="list-style-type: none"> <li>Design a bot to display messages using Sequence and Flowchart activities.</li> <li>Design a bot to display the sum of two variables by taking two variables as input and produce the output.</li> </ul>
3	Working with Microsoft Excel: <ul style="list-style-type: none"> <li>Design a bot to open a Microsoft Excel sheet and read data into a datatable.</li> <li>Design a bot to compare two columns in an excel sheet. The output should display 'Match/Not Match' against the corresponding cell in the sheet.</li> </ul>
4	Working with Desktop Automation: <ul style="list-style-type: none"> <li>Design a bot to create a text file, write "Hello World" into it and save it at the desired location using the 'Recorder' feature.</li> <li>Design a bot for automating disk clean-up processes.</li> </ul>
5	Working with Websites: <ul style="list-style-type: none"> <li>Design a bot to scrape data from a website and store it in a Microsoft Excel sheet.</li> <li>Design a bot to fill a webform from the data stored in a Microsoft Excel sheet.</li> </ul>
6	Working with Documents: <ul style="list-style-type: none"> <li>Design a bot to read a true PDF file and fill the webform.</li> <li>Design a bot to read a word file and then create a list of unique words in an excel sheet.</li> </ul>
7	Working with Images: <ul style="list-style-type: none"> <li>Design a bot to read a scanned image of an invoice and store the extracted data in a .CSV file.</li> <li>Design a bot to perform Optical Character Recognition (OCR) on a saved image using OCR activities.</li> </ul>
8	Working with Emails: <ul style="list-style-type: none"> <li>Design a bot to read unread emails from inbox.</li> <li>Design a bot to send email with attachments to multiple receivers.</li> </ul>
9	Handling Exceptions: <ul style="list-style-type: none"> <li>Apply exception handling to previously developed automations.</li> </ul>
10	Working with Orchestrator: <ul style="list-style-type: none"> <li>Configure UiPath Orchestrator and setup tenant, machine, environment and robots.</li> <li>Design a bot to create a Queue in Orchestrator and store the subject of the email in .CSV.</li> <li>Configure Orchestrator to run a process as per a given schedule.</li> </ul>
11	<b>Mini Projects</b> (choose one): <ul style="list-style-type: none"> <li>RPA bot to send notifications to students when their attendance falls below 75%.</li> <li>RPA bot to extract and collate job openings from multiple job portals.</li> <li>RPA bot to extract and display news from Google News.</li> </ul>
12	Deploy <b>Mini Projects</b> using Orchestrator.