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नेशनल इंस्टीट्यूट ऑफ इलेक्ट्रॉनिक्स एंड इंफॉर्मेशन टेक्नोलॉजी, चेन्नई

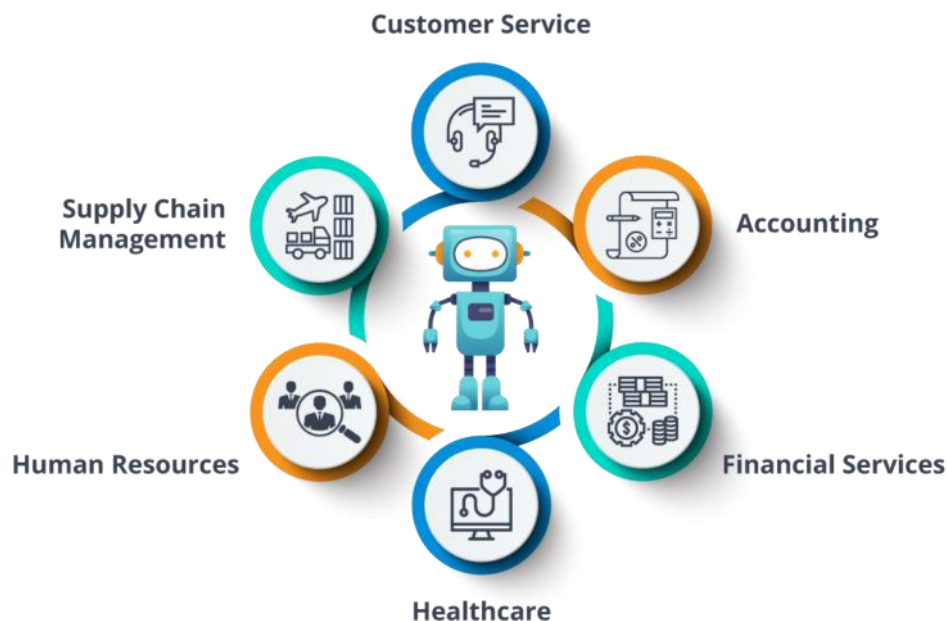**National Institute of Electronics and Information Technology, Chennai**

Autonomous Scientific Society of Ministry of Electronics & Information Technology (MeitY), Govt. of India

ISTE Complex, 25, Gandhi Mandapam Road, Chennai - 600025

Course Prospectus

Online Certificate course on Robotic Process Automation using UiPath

Mode: Online

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Course Prospectus

Name of the Group: Embedded System

Course Name: Online Certificate Course On Robotic Process Automation Using UiPath

Course Code: RP 100

Duration: 2 Weeks

Last Date of Registration: 22-09-2022

Display of Provisional Selection List: 23-09-2022

Course Start Date: 26-09-2022

Preamble:

RPA Stands for Robotic process automation. RPA is the use of specialized computer programs, known as software robots, to automate and standardize repeatable business processes. Robotic Process Automation enables business professionals to easily configure software robots to automate repetitive, routine work between multiple systems. These "bots" work directly across application user interfaces, mimicking the actions a person would perform, including logging in and out of applications, copying and pasting data, opening emails and attachments, and filling out forms.

RPA can be an important tool in solving automation challenges and pushing organizations to grow into digital workplaces. However, it is just one part of an organization's digital transformation toolkit. Going beyond automating everyday repetitive tasks, RPA combined with traditional content services and business process management technologies can help organizations reach even higher potentials and make the most of their of automation strategies. Whether optimizing end-to-end automation initiatives or enabling employees to be more efficient in handling one-off projects, RPA helps fill in the gaps as a powerful, complementary technology to reduce costs and increase productivity. This Online Certificate course on Robotic Process Automation focuses on the creation, testing and validation of business tasks using UiPath tool based software robots/digital worker.

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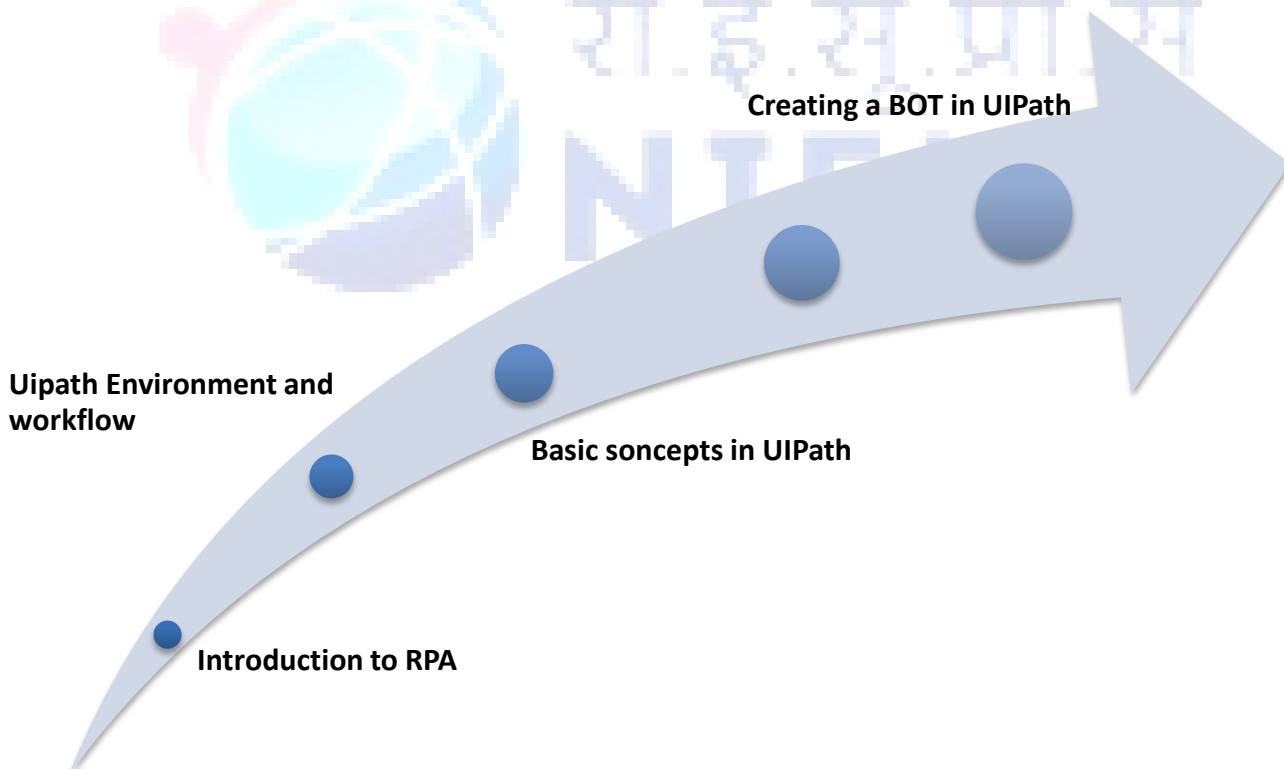Government of India

Objective of the Course:

To develop the skillset required for the students/professionals to work in creation, testing and validation of the automation tasks in RPA using UiPath.

Outcome of the Course:

After the successful completion of the module, the students will be able to:

- Understand what Robotic Process Automation (RPA) is all about
- Able to learn about one of the powerful RPA tools
- Apply the UiPath RPA tools and functions in various industries
- Hands on exposure in different automation examples
- Perform and control various tasks using RPA bots

Full Flow of Course

Creating a BOT in UIPath

Basic soncepts in UIPath

Uipath Environment and workflow

Introduction to RPA

Course Structure

S.No	Module Name	Duration (in Hours)
1.	Introduction to RPA	2
2.	Basic UiPath Concepts	2
3.	Variables and Data Types	2
4.	Control Flow & Data Manipulation	2
5.	Excel and Data Tables	2
6.	PDF Automation & Email Automation	2
7	Recording & Project Organization	2
8	UI Interactions & Selectors	2
9	Project Organization	2
10	Error Handling & Debugging	2
Total Duration		20

Course Fees

Course fee is Rs. 1,000/- Including GST.

Instalment No.	Last Date for Payment	Amount (in Rs.)
1.	22-09-2022	Rs.1,000/-

GST is Applicable as per Govt. Norms GST (currently it is 18%).

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Eligibility

- ✓ XII standard or Diploma or B.E/B.tech any stream

Number of Seats: 30 Seats

How to Apply?

Candidates can apply online in our website http://reg.nielitchennai.edu.in. Payment towards non-refundable registration fee can be paid through any of the following modes:

- ✓ Online transaction: Account Name: NIELIT CHENNAI, Account No: 31185720641, Bank name: State Bank of India (SBI), Branch: Kottur (Chennai), IFSC Code: SBIN0001669.
- ✓ Pay through UPI Mobile Apps

Note: *The Institute will not be responsible for any mistakes done by either the bank concerned or by the depositor while remitting the amount into our account*

Last date of Registration: 22nd September, 2022

Registration Procedure

All interested candidates are required to fill the Registration form online with registration fees before 22nd September, 2022 with all the necessary information.
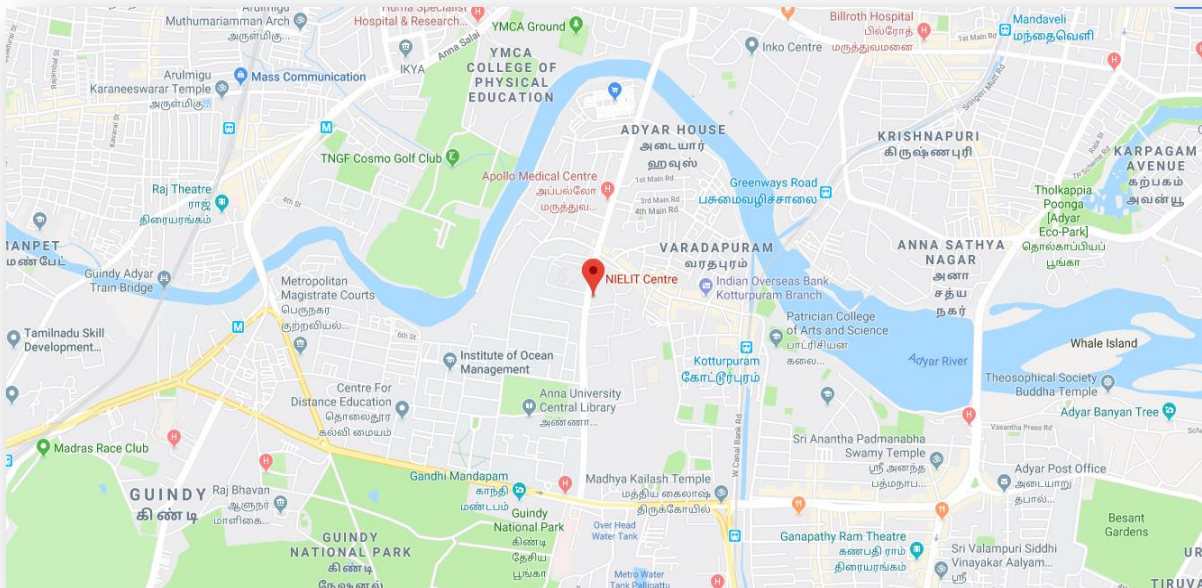
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Admission:

All selected candidates whose documents are verified and paid the fees (full or first instalment) and verified by accounts section of NIELIT Chennai will get a welcome message in his/her login ID provided during registration. The Credential and URL for online portal will be shared through WhatsApp or email.

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Discontinuing the course

No fees (including the security deposit) under any circumstances, shall be refunded in the event of a student who have completed the process of admission or discontinuing the course in between. No certificate shall be issued for the classes attended. Only Grade Sheet will be issued.

Course Timings: This program is a practical oriented one and hence there shall be more lab than theory classes. The cloud based online theory classes will be on forenoon and lab session will be conducted mostly on afternoon time.

Location and how to reach: NIELIT Chennai is located at Gandhi Mandapam Road, Kotturpuram, Chennai (Landmark:Opp.ToAnnaCentenaryLibrary).

Address:

National institute of Electronics and Information Technology

ISTE Complex, No. 25, Gandhi Mandapam Road, Chennai – 600025

E-mail: raghavendran[at]nielitchennai[dot]edu[dot]in/ Phone: 044-24421445

Contact Person: Mr. Raghavendran S   Mobile: 8807775697(Call @ 9 AM to 6) PM)

Course enquiries

Students can enquire about the various courses either on telephone or by personal contact between 9.15 A.M. to 5.15 P.M. (Lunch time 1.00 pm to 1.30 pm) Monday to Friday.

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Important Dates

Last Date of Registration: 22-09-2022

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Course Start Date: 26-09-2022

Examination & Certification

✓ Final Certificates will be issued after successful completion of the course . For getting certificate a candidate has to pass with minimum required marks of 50%.

Grading Scheme

✓ Certificate will be issued to the participants based on the marks scored in the examination conducted after the completion of training. The grading pattern will be as below:

Grade	S	A	B	C	D	Fail
Marks Range (in %)	>90%	80%-89%	70%-79%	60%-69%	50%-59%	<50%

✓ Candidates not eligible for a grade certificate will be awarded a participation certificate.

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Annexure

Detailed Syllabus of the Course

RP 100: Certificate course in RPA

Module Duration: 2 Weeks

Introduction to RPA

- What is RPA
- Why RPA
- Lifecycle of RPA
- Advantages and Disadvantages of RPA
- RPA Use cases
- Industries using RPA
- RPA Tools
- Application Software
- Communication Software
- Development and debugging Tools

Basic UiPath Concepts

- How UiPath works
- UiPath Installation
- Different kind of Panels
- Basic Process

Variables, Data Types and Workflows

- Creating, Managing Variables
- Type of Variables
- Data Types
- Types of workflows

Control flow:

- If else then
- Do while
- While
- For Each
- Switch

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Data Manipulation:

- Strings
- Lists
- Dictionaries

Excel and Data Tables:

- Build Data Table
- Read from excel
- Writing to excel
- Add column
- Add row
- Clear data table
- Filter data table
- Generate data table
- Join data table
- Lookup data table
- Merge data table
- Remove data column and data row
- Remove duplicate rows
- Sort table

PDF Automation

- Adobe Acrobat PDF
- PDF Data Extraction
- Read PDF Text
- Read PDF with OCR

Email Automation

- Get IMAP Mail Message
- Send & Receive SMTP Mail Message
- Send & Receive SMTP Mail Message with attachment and screenshot
- Get Outlook Mail Message

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Recording

- Types of Recording
- Basic Recording
- Desktop Recording
- Web Recording
- Image Recording
- Citrix Recording
- Automatic and Manual Recording

UI Interactions

- Inputs Methods
- Output Methods
- Working with UI elements

Selectors

- What is selectors
- Selectors with wildcard
- Types of selectors
- Full Selectors
- Partial Selectors
- Dynamic Selectors

Basic UiPath Concepts

- How UiPath works
- UiPath Installation
- Different kind of Panels
- Basic Process

Error and Exception handling

- Error
- Exception handling
- Common and Business Rule Exceptions
- Global Exception Handler

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Debugging

- Debugging Panel
- Run from activity
- Run to the activity
- Test Activity

Faculty Details

Ishant Kumar Bajpai

Scientist 'C'

Ishant Kumar Bajpai, Scientist 'C', NIELIT Chennai Has more than 8 years' experience in Coordination and Implementation of funded projects in the area of IoT and VLSI with the application in Biomedical & Automotive. He has successfully executed 1 funded capacity building project in Karnataka & Kerala State and involved in the implementation of 4 skill development /capacity building projects funded by MeitY in the states of Tamil Nadu, Andhra Pradesh and Telangana. Before joining the NIELIT, he was working as a Scientific Officer in the IT Research Academy Division of Digital India Corporation (erst. Media Lab Asia), where he was involved in the Project Planning, Design and Implementation of projects in the domain of Mobile Computing, Networking & Applications.

S. Raghavendran

Resource Person-RPA

Raghavendran. S, Resource Person RPA having 3 years of experience in Robotics and automation and handing training session and Labs on UiPath studio with the background of electronics and instrumentation.