

# ADVANCED SKILL DEVELOPMENT COURSES



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## Additional Skill Acquisition Programme (ASAP)

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The Additional Skill Acquisition Programme (ASAP) is a skilling intervention, jointly implemented by the Department of General Education and the Department of Higher Education, Government of Kerala, targeted towards tackling the issue of low employability among youth in Kerala, by imparting foundation skills and industry-relevant training to select students of Government and Government-

aided schools and undergraduate colleges, which are associated Partner Institutions within the programme. From its inception in 2012, ASAP has been able to make commendable impact within the skilling eco-system in the State, both in terms of skilling the youth of the State, as well as implementing national qualification framework and establishing programme-wise quality assurance framework.

## Advanced Skill Development Centers (ASDCs)

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Realizing the gap between the skill sets required by the industry and the knowledge level of the students in Higher education institutions in the state, ASAP set up its Advanced Skill Development Centres in Engineering Colleges and Polytechnics across Kerala. The ASDCs are envisioned to equip students with futuristic and advanced skill sets required for 4.0 industrial revolution. The

training conducted through ASDCs will be in sync with industry requirements regularly updated to meet emerging market needs and will be transacted through qualified and competent professionals thereby equipping students with the skills, capabilities and competencies required to be globally competitive and tap the emerging potential opportunities.

## What we do?

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### Identifying institutions for setting up ASDCs:

The institutions where the ASDCs are set up and courses are offered are identified considering academic factors such as the results of students, interest of the institution fraternity towards new schemes, infrastructure available at the institutions, etc. A nodal officer is also appointed at each ASDC for coordinating the activities for the respective institution.

### Faculty Development Programmes:

Based in the underlying perception that the upskilling of the pupil begins with the upskilling of the teacher, ASAP conducts regular "Training of Trainers" programmes to bring to pace the faculty members with the changes in the technologies used by the industry.

### Student Mobilization:

ASAP has a strong team of over 200 Programme Managers across the state who are actively involved in student mobilization activities such as campaigning at each

institution and orientation to the students across colleges and subject streams to facilitate informed decision-making.

### Offer courses based on Industry Skill Requirements

Based on field surveys and analysis of various studies conducted we list down the courses that are currently industry-relevant. The courses and the curriculum is regularly updated to meet the emerging market needs and prepare human resources in future ready skills demanded by 4th generation industry. The courses offered at ASDCs are either developed in-house by the Curriculum division of ASAP or offered by major industries working in the skill development domain. All the courses offered at ASDCs are NSQF aligned.

### Course transaction:

The courses are offered at ASDCs using teaching aids such as videos, presentations and study material, that is available both offline as well as online, to ensure that core

ideas and concepts are delivered in the intended manner. The faculty trained through the FDP aid the students in completing the courses on time. Furthermore, innovative strategies such as focus group discussions are conducted among students at different skill levels to understand their aspirations. Feedbacks are collected from students at regular intervals to formulate training methods that suit student needs.

#### Assessment & Certification:

The assessments for the courses are conducted by the industry partners through separate assessment platforms. The students successfully completing all Modules and assessments of the course, will be jointly certified by ASAP and the respective industry partner who is the course provider for that course

## Courses to be offered in Engineering Colleges:

Course Name	Duration	Beneficiary Category	Branch	Industry Partner	Fees	Certification
Artificial Intelligence Developer	756 Hours	S5	Any	ASAP	Rs 35000/-	Exact Amount to be fixed
Life Skill Module	100 Hours	3 <sup>rd</sup> Semester	Any	ASAP	Rs3000/- Engineering Colleges	Rs 2500/- (BEC Certification)
Google Associate Cloud Engineer	48 Hours	7 <sup>th</sup> Semester	CS/IT/ECE	Google	NIL	40\$
Robotic process Automation	42 Hours	5 <sup>th</sup> Semester	Any	UiPath	NIL	150\$
Virtual Reality 201 – beginner Level	60 Hours	5 <sup>th</sup> Semester	Any	Facebook School of Innovation – sv.co	NIL (for 1st Batch)	NIL (for 1st Batch)
TCS – Industry Honor Certification	4 Semesters (Each Course 90 Hours)	5 <sup>th</sup> Semester	Any	TCS	Rs 42000/- for 4 electives	IHC will be awarded for students who successfully complete all 4 courses
Salesforce Developer	92 Hours	7 <sup>th</sup> Semester	Any	Salesforce	NIL	200 \$
Salesforce Administrator/ Business Analyst	48 Hours	3 <sup>rd</sup> Semester	Any	Salesforce	NIL	200 \$
Generative Design Beginner Level	45 Hours	3 <sup>rd</sup> Semester	Mechanical/ Civil	AUTODESK		Rs 3000 + GST
AWS Academy Cloud Foundation	20 Hours	5 <sup>th</sup> Semester	Any	AWS Academy	NIL	50\$ + GST
AWS Academy Cloud Associate	40 Hours	Students completing Cloud Foundation	Any	AWS Academy	NIL	75\$ + GST
SDPK Courses	Details will be communicated later					

## Courses to be offered in Polytechnics:

Course Name	Duration	Beneficiary Category	Branch	Industry Partner	Fees	Certification
Life Skill Module	100 Hours	1 <sup>st</sup> Semester	Any	ASAP	Rs 1500/- for Polytechnic	Rs 2500/- (BEC Certification)
Salesforce Administrator/ Business Analyst	48 Hours	3 <sup>rd</sup> Semester	Any	Salesforce	NIL	200 \$
Salesforce Developer	92 Hours	5 <sup>th</sup> Semester	Any	Salesforce	NIL	200 \$
Generative Design Beginner Level	45 Hours	3 <sup>rd</sup> Semester	Mechanical / Civil	AUTODESK	NIL	Rs 3000 + GST
AWS Academy Cloud Associate	40 Hours	Students completing Cloud Foundation	Any	AWS Academy	NIL	75\$ + GST

## ROBOTIC PROCESS AUTOMATION DEVELOPER

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Robotic Process Automation is the technology that allows anyone today to configure computer software, or a “robot” to emulate and integrate the actions of a human interacting within digital systems to execute a business process. RPA robots utilize the user interface to capture data and manipulate applications just like humans do. They interpret, trigger responses and communicate with other systems in order to perform on a

vast variety of repetitive tasks. RPA allows organizations to automate at a fraction of the cost and time previously encountered. RPA is also non-intrusive in nature and leverages the existing infrastructure without causing disruption to underlying systems, which would be difficult and costly to replace. With RPA, cost efficiency and compliance are no longer an operating cost but a byproduct of the automation.

The course on Robotic Process Automation consists sub 3 courses:

- 1) Robotic Process Automation- Foundation
- 2) Robotic Process Automation- Advanced
- 3) Robotic Process Automation Continuous Learning

### Objective

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- To understand Basic Programming concepts and the underlying logic/structure
- To describe RPA , where it can be applied and how its implemented
- To describe the different types of variables, Control Flow and data manipulation techniques
- To Understand Image, Text and Data Tables Automation
- To describe automation to Email and various types of Exceptions and strategies to handle



## COURSE OUTCOMES:

After the completion of the course the student will be able to

<b>CO 1</b>	Students will be able to understand Basic Programming concepts and the underlying logic/structure
<b>CO 2</b>	Students will learn to describe RPA , where it can be applied and how its implemented
<b>CO 3</b>	Students will be able to describe different types of variables, Control Flow and data manipulation techniques.
<b>CO 4</b>	Students will be able to identify and understand Image, Text and Data Tables Automation
<b>CO 5</b>	Students will be able to describe automation to Email and various types of Exceptions and strategies to handle

## COURSE DETAILS:

PARTICULARS	RPA DEVELOPER	RPA DEVELOPER
	FOUNDATION	ADVANCED
<b>DURATION</b>	40 HOURS	50 HOURS
<b>TRAINER</b>	FACULTY (MENTORSHIP- NO REMUNERATION)	
<b>MODE OF DELIVERY</b>	ONLINE WITH STUDY JAMS	
<b>BENEFICIARY GROUP</b>	SEMESTER 5 <sup>th</sup> FOR ENGINEERING COLLEGES	Students who complete RPA DEVELOPER FOUNDATION( 6 <sup>th</sup> Semester)
<b>BRANCH</b>	ANY	
<b>FEE STRUCTURE</b>	NIL	
<b>CERTIFICATION FEES</b>	150 \$ , But ASAP students will 50% DISCOUNT for the final certification.	

## COURSE HIGHLIGHTS

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- Learn the skills of future with Free RPA Training
- Digital Training with study jams
- Association with UiPath
- Technological Day with Quizzes and certificates
- 50 % Discount for the certification

## PROJECTED JOB OPPORTUNITIES

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- Robotic Process Automation Manager
- Consultant Robotic Process Automation
- Robotic Process Automation developer

## SYLLABUS OF THE COURSE- RPA FOUNDATION

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### MODULE 1 | INTRODUCTION TO RPA DEVELOPER ROLE

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Getting Started with UiPath-The RPA Developer Journey- About RPA Developer Foundation- Welcome to RPA- Meet the UiPath Suite- Meet the UiPath Platform-Your first Encounter with UiPath Studio- What is Business Process- The RPA Journey-Learning Resources- Engage the UiPath Community- Receive Credit

### MODULE 2 | VARIABLES, DATA TYPES AND CONTROL FLOW

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About this Course-Variables and Arguments, Data Types- Control Flow- Control Flow Overview-The If Statement Loops Switch-Practice-Practice 1 - For Each & If Statement- Practice 2 – Generic Value-

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Practice 3 - Switch- Learning Resources-Engage the UiPath Community-QUIZ- Variables, Data Types and Control Flow-Receive Credit

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### **MODULE 3** | **DATA MANIPULATION**

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About this Course-Data Manipulation-Overview-Strings- Lists-Dictionaries-RegEx Builder-Practice-Practice 1 - Lists-Practice 2 - Lists & Date Times-Practice 3 - Dictionaries & Integers-Practice 4 - Dictionaries & Doubles-Practice 5 - Input Validation-Practice 6 - Replacing Placeholders-Practice 7 - Extract Email Address-Practice 8 - Extract Email Address with RegEx- Learning Resources-Engage the UiPath Community-Quiz: Data Manipulation-Receive Credit

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### **MODULE 4** | **EXCEL AND DATA TABLES**

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About this Course- Data Tables-What are Data Tables?- Data Table Activities-Workbooks and Common Activities Excel Application Scope and Specific Activities- Practice-Practice 1 - Calculating Sums-Practice 2 - Calculating Loss Invoices-Practice 3 - Calculating Percentages of Expenses-Learning Resources-Engage the UiPath Community-Quiz: Excel and Data Tables- Receive Credit

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### **MODULE 5** | **UI INTERACTIONS**

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About this Course-UI Interactions-Input Actions & Methods-Output Actions & Methods- Working with UI Elements-Practice-Practice 1 - Input Actions & Methods-Practice 2 - Output Actions & Methods-Practice 3 - Data Scraping & UI Elements-Learning Resources-Engage the UiPath Community-Quiz: UI Interactions- Receive Credit

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### **MODULE 6** | **SELECTORS**

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About this Course-Introduction to Selectors- The UI Explorer-Types of Selectors-Fine-tuning-Managing Difficult Situations- PRACTICE-Practice 1 - Get and Sort Data-Practice 2- Set Data- Practice 3- Highlight WFT Type Items- Learning Resources- Engage the UiPath Community- Quiz: Selectors- Receive Credit

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### **MODULE 7** | **PROJECT ORGANIZATION**

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About this Course- PROJECT ORGANIZATION-How to choose the best project layout?- How to break down a complex process?- How to reuse parts of a project?- How to manage versions of the same project?- How to prevent and solve exceptions?- Best Practices- PRACTICE- Practice 1 - Quiz- Practice 2 - State Machines- Practice 3 - Fix My Workflow- Practice 4 - Libraries- Learning Resources-Engage the UiPath Community-Quiz: Project Organization-Receive Credit

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## **MODULE 8** | **ERROR AND EXCEPTION HANDLING**

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About this Course- Error and Exception Handling- Common Exceptions-Try Catch-Retry Scope- Continue On Error Property-Global Exception Handler-PRACTICE-Practice 1 - Automation of Spreadsheet Calculation-Practice 2 - Using the Global Exception Handler-Learning Resources-Engage the UiPath Community-Quiz: Error and Exception Handling- Receive Credit

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## **MODULE 9** | **DEBUGGING**

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About this Course- Debugging Features- Overview- Basic Debugging Features- Advanced Debugging Features-Practice - Fix My Workflow-Learning Resources- Engage the UiPath Community-Quiz- Debugging Quiz-Receive Credit

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## **MODULE 10** | **PDF AUTOMATION**

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About this Course- Video Lessons- Extracting data from PDF-Extracting a single piece of data  
The Anchor Base activity-PRACTICE-Practice 1-LEARNING RESOURCES-Learning Resources  
Engage the UiPath Community- Quiz: PDF Automation-Receive Credit

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## **MODULE 11** | **E-MAIL AUTOMATION**

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About this Course-Video Lessons- Interacting with e-mails- Sending e-mails-PRACTICE-Practice 1-  
Practice 2-TO SUM UP- Learning Resources-Engage the UiPath Community-Quiz: E-mail Automation  
Receive Credit

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## **MODULE 12** | **ORCHESTRATOR FOR DEVELOPERS**

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About this Course- Orchestrator- Part 1- Introduction to Orchestrator-Orchestrator Key Concepts- Robots and Environments in Orchestrator- Process Execution in Orchestrator-ORCHESTRATOR PRACTICE - PART 1-Practice 1 - Connect a robot to Orchestrator-Practice 2 - Publish a package to Orchestrator- Practice 3 - Create and run a Job- Practice 4 - Modify a package in Orchestrator-Practice 5 - Run a job with an updated process- Practice 6 - Add schedules- Orchestrator- Part 2-Assets-Queues- ORCHESTRATOR PRACTICE - PART 2- Practice 7 - Assets in Orchestrator- Practice 8 – Queues- Learning Resources- Engage the UiPath Community- Quiz: Orchestrator for Developers- Receive Credit

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## **MODULE 13 | ROBOTIC ENTERPRISE FRAMEWORK OVERVIEW**

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About this Course- Introduction to Robotic Enterprise Framework-Transaction Processing- The REFramework-Dispatcher & Performer-Robotic Enterprise Framework Demo- Dispatcher & REFramework Performer Demo-Learning Resources-Engage the UiPath Community-Quiz: Robotic Enterprise Framework Overview-Receive Credit

**Feedback Survey- Robotic Enterprise Framework Deep Dive**

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**Generate the Course Completion Certificate**

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## **SYLLABUS OF THE COURSE- RPA ADVANCED**

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### **MODULE 1 | ROBOTIC ENTERPRISE FRAMEWORK**

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About this Course- Before Getting Started-ROBOTIC ENTERPRISE FRAMEWORK- Robotic Enterprise Framework-PRACTICE-Practice 1- Learning Resources- Engage the UiPath Community-Receive Credit

### **MODULE 2 | ASSIGNMENT: CALCULATE CLIENT SECURITY HASH**

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Calculate Client Security Hash - Process Design Document- Calculate Client Security Hash - Exercise Hints- Calculate Client Security Hash - Upload Assignment-Calculate Client Security Hash - Complete Exercise Walkthrough

### **MODULE 3 | ASSIGNMENT: GENERATE YEARLY REPORT**

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Calculate Client Security Hash - Process Design Document- Calculate Client Security Hash - Exercise Hints- Calculate Client Security Hash - Upload Assignment- Calculate Client Security Hash - Complete Exercise Walkthrough

**Feedback Survey- Robotic Enterprise Framework Deep Dive**

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**Generate the Course Completion Certificate**

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