

# BCA in Artificial Intelligence and Process Automation

## Objective

This unique program provides career options for the students in the fast-growing technology sector of 'Process Automation and AI'. The program is designed to include all the foundation subjects of a traditional undergraduate computer science program, and then specialization in Process Design, Management and Process Automation using AI concepts. A typical example will be IPA (Intelligent Process Automation) which is used extensively in Digital Transformation Programs.



## Facts

- ✚ Process Automation is meant to complement human workers and make their jobs easier and more efficient.
- ✚ The adoption of process automation technology will actually create new and better opportunities for people to pursue, ultimately elevating the role of the human worker.
- ✚ Process automation can be applied to almost any repetitive manual task, workflow or business process, Industrial Process and will be sought after across domains.



## What is Process Automation?

- ✚ In the new Digital world efficiency and speed are the hall marks of success. Intelligent Process automation (PA) is the application of technology to automate engineering and Business Processes. Such automation will allow employees in a company to configure computer software or a “robot” to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses, making intelligent decisions and communicating with other digital systems.

### Example: Intelligent Process Automation

- ✚ Intelligent Process Automation is economically efficient than any other automation solutions that exist currently. Implementing intelligent process automation for redundant business processes also enables human beings to shift their focus from repetitive tasks to tasks requiring emotional intelligence, reasoning, judgement and interactions with the customers.
- ✚ Domains: Industrial Automation, IoT Automation, Healthcare, Financial Systems and Public sector

## Why should you join BCA in Process Automation and AI?

Process Automation with AI or Intelligent Process Automation (IPA) is currently one of the most popular Artificial Intelligence application areas as it allows companies with legacy systems to automate their work flow with significant benefits.

- ✚ One of the fastest growing sectors in the IT industry
- ✚ Gartner forecasts the Intelligent process automation software market will grow by 41% year on year, and reach US \$ 8 B by 2020.
- ✚ The global Process Automation market size is expected to reach US \$ 188 B by 2023.
- ✚ The volume of Intelligent Process Automation jobs has already grown over fifteen times from 2016 to 2018.

### To meet this demand, this unique specialization program has been designed and the teaching and learning plan is as follows:

- ✚ Program offers flexibility to students in making their career choices in either of the niche areas or in a combination of them
- ✚ Unique learning path that teaches foundational courses, relevant technical courses, Industry orientation for skills and finally career readiness of students (Soft skills+ Aptitude+ technical skills)
- ✚ The program design has a high level of Industry interaction and enhances significantly Industry Readiness Quotient
- ✚ Offers opportunities for Value Added Programs that complements learning through academic curriculum
- ✚ The curriculum includes Basic Sciences, Computer science fundamentals,

Process management fundamentals, Six Sigma and Lean Sigma Concepts, Data science and AI fundamentals, and then creates specific elective paths for multiple domains

- ✦ Augments curriculum with pragmatic approach through projects, knowledge exchange forums and sessions by professionals

### What job opportunity awaits you?

- ✦ Software Engineer
- ✦ Process Automation Consultant
- ✦ Industrial Process Automation Consultant
- ✦ RPA Analyst
- ✦ Intelligent Automation Architect
- ✦ Automation Tester

### Learning Path

- ✦ **Foundation Level:** Programming using C# and .NET, Networking fundamentals, Basic Electronics, Software Engineering concepts, Process Design Fundamentals, Mathematics and Statistics, Data Science, Introduction to Automation,
- ✦ **Intermediate Level:** Web Programming, Introduction to AI, Introduction to Bots in Business, Information and Network Security, Lean sigma
- ✦ **Professional Level:** Introduction to intelligent Automation Tools such as UiPath, Industrial Automation Systems, Business Process Management

### Prerequisites:

- ✦ PUC Board Examination or equivalent with Physics, Mathematics and Chemistry/Computer science/Statistics
- ✦ Diploma in Engineering in Electronics with Mathematics as a mandatory subject

**Career opportunities  
with the companies  
on intelligent  
Process Automation**

