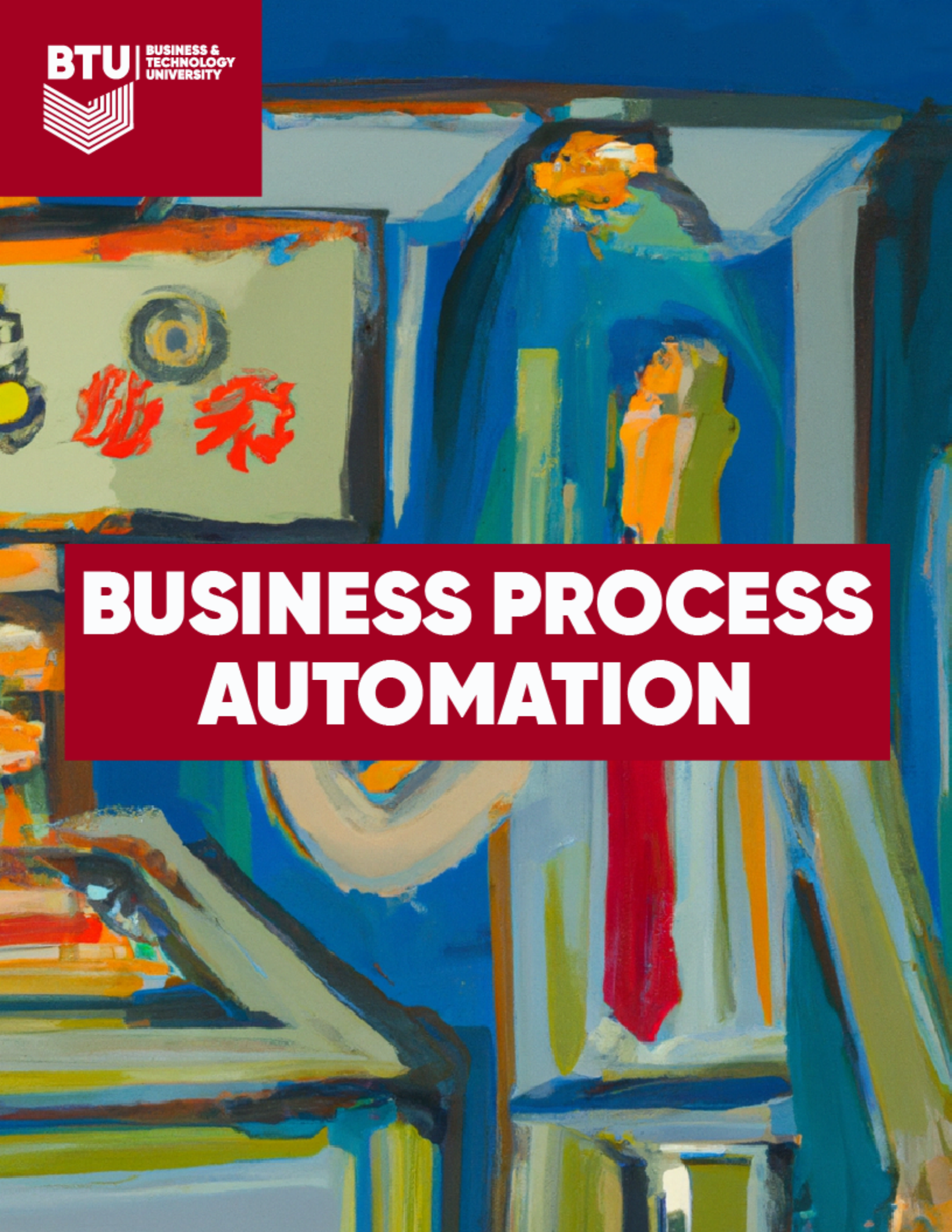
BTU | BUSINESS & TECHNOLOGY UNIVERSITY



# BUSINESS PROCESS AUTOMATION

# Business Process Automation

## Course Description

Business Process Automation (BPA) is the use of technology to automate repetitive, manual, and time-consuming business processes. This training program provides an overview of BPA, its benefits, and the different types of automation technologies available. Participants will learn how to analyze and design business processes for automation, and how to select the most appropriate BPA methodology. The program covers testing, deployment, and maintenance of automated processes, as well as how to evaluate the effectiveness of BPA using key performance indicators (KPIs) and return on investment (ROI) calculations. In addition, the program covers emerging technologies in BPA and the ethical considerations associated with BPA.

## Learning Outcomes

- Understand the definition, importance, and benefits of BPA
- Identify and analyze business processes for automation
- Select the most appropriate BPA methodology for a given process
- Develop implementation plans and change management strategies for BPA
- Create test plans and strategies for deployment and maintenance of automated processes
- Evaluate the effectiveness of BPA using KPIs and ROI calculations
- Identify emerging technologies in BPA and the ethical considerations associated with BPA

## Module 1: Introduction to Business Process Automation

### 1.1 Overview of Business Process Automation

- Definition and importance of business process automation
- Benefits of business process automation to organizations
- Different types of automation (e.g. Robotic Process Automation, Artificial Intelligence)

### 1.2 Business Process Automation Methodologies

- Agile methodology for BPA
- Waterfall methodology for BPA

- Lean Six Sigma methodology for BPA

***Homework Assignment:***

Choose one BPA methodology discussed in this module and write a brief summary of the methodology. Research and provide examples of companies or industries that have successfully used this methodology for BPA.

***Evaluation Criteria:***

- The student demonstrates an understanding of the different BPA methodologies
- The student provides specific and relevant examples to support their research
- The student presents their findings in a clear and concise manner

# Module 2: Business Process Analysis and Design

## 2.1 Identifying Processes for Automation

- Factors to consider when selecting processes for automation
- How to identify and prioritize processes for automation

## 2.2 Process Mapping and Analysis

- Using process mapping tools to visualize current processes
- Analyzing current processes for improvement opportunities
- Designing new processes for automation

***Homework Assignment:***

Choose a process from your workplace and create a process map using a process mapping tool. Analyze the current process for inefficiencies or bottlenecks, and propose a redesigned process for automation.

***Evaluation Criteria:***

- The student demonstrates an understanding of how to use process mapping tools to identify process inefficiencies
- The student provides a well-designed and feasible process for automation
- The student presents their findings in a clear and concise manner

# Module 3: Business Process Automation Technologies and Tools

## 3.1 Robotic Process Automation (RPA)

- Definition and benefits of RPA
- Examples of RPA tools and technologies

## 3.2 Artificial Intelligence (AI)

- Definition and benefits of AI for BPA
- Examples of AI technologies used for BPA

## 3.3 Business Process Management (BPM) and Business Execution Process (BEP)

- Overview of BPM and BEP

***Homework Assignment:***

Research and summarize the differences between RPA and AI for BPA. Provide specific examples of industries or processes that would benefit more from RPA or AI, and explain why.

***Evaluation Criteria:***

- The student demonstrates an understanding of different BPA technologies and tools
- The student provides specific and relevant examples to support their research
- The student presents their findings in a clear and concise manner

# Module 4: Implementing Business Process Automation

## 4.1 Implementation Planning

- Identifying stakeholders and project team members
- Creating an implementation plan
- Identifying potential risks and mitigation strategies

### 4.2 Change Management

- Understanding the impact of BPA on the organization and its employees
- Developing a change management plan
- Communication strategies for managing change

***Homework Assignment:***

Choose a business process and develop an implementation plan for automating the process. Identify potential risks and mitigation strategies, and create a change management plan to address the impact on employees.

***Evaluation Criteria:***

- The student demonstrates an understanding of implementation planning and change management for BPA
- The student identifies potential risks and provides relevant mitigation strategies
- The student presents their findings in a clear and concise manner

## Module 5: Business Process Automation Testing and Deployment

### 5.1 Testing and Quality Assurance

- Creating test plans and test cases
- Performing functional and non-functional testing
- Quality assurance best practices for BPA

### 5.2 Deployment and Maintenance

- Deploying the automated process
- Monitoring and maintaining the automated process
- Continuous improvement

### 5.3 Compliance and Security

- Compliance requirements for BPA
- Security risks and best practices for BPA

***Homework Assignment:***

Create a test plan for an automated process. Identify the types of testing that should be performed and the expected outcomes. Develop a plan for deploying and maintaining

the automated process, including strategies for continuous improvement, compliance, and security.

***Evaluation Criteria:***

- The student demonstrates an understanding of testing and quality assurance for BPA
- The student provides specific and relevant examples of compliance and security risks for BPA
- The student presents their findings in a clear and concise manner

# Module 6: Evaluating Business Process Automation

## 6.1 Key Performance Indicators (KPIs) for BPA

- Identifying KPIs for evaluating the effectiveness of BPA
- Measuring and tracking KPIs
- Using KPIs to drive continuous improvement

## 6.2 Return on Investment (ROI) for BPA

- Calculating ROI for BPA projects
- Identifying and quantifying cost savings and benefits
- Communicating ROI to stakeholders

***Homework Assignment:***

Choose a BPA project and identify key performance indicators (KPIs) for evaluating its effectiveness. Develop a plan for measuring and tracking the KPIs, and calculate the ROI of the project. Present your findings and recommendations to stakeholders.

***Evaluation Criteria:***

- The student demonstrates an understanding of KPIs and ROI for BPA
- The student provides specific and relevant examples of KPIs and ROI calculations for a BPA project
- The student presents their findings and recommendations in a clear and concise manner

# Module 7: Future of Business Process Automation

## 7.1 Emerging Technologies for BPA

- Overview of emerging technologies in BPA (e.g. blockchain, machine learning)
- Potential benefits and challenges of adopting emerging technologies in BPA

## 7.2 Ethical Considerations in BPA

- Ethical challenges and concerns in BPA
- Strategies for ensuring ethical BPA practices

***Homework Assignment:***

Research and summarize an emerging technology that has the potential to transform BPA. Discuss the potential benefits and challenges of adopting this technology. Analyze the ethical considerations associated with the technology and propose strategies for ensuring ethical BPA practices.

***Evaluation Criteria:***

- The student demonstrates an understanding of emerging technologies in BPA
- The student provides specific and relevant examples to support their research
- The student presents their findings in a clear and concise manner

*The Business Process Automation (BPA) training program provides an overview of BPA and its importance to organizations. Participants learn about the different types of automation technologies available, including Robotic Process Automation (RPA), Artificial Intelligence (AI), and Business Process Management (BPM) and Business Execution Process (BEP). They also learn how to analyze and design business processes for automation, using process mapping tools to visualize current processes and identifying inefficiencies or bottlenecks that can be addressed through automation. Participants learn how to select the most appropriate BPA methodology for a given process, including Agile, Waterfall, and Lean Six Sigma methodologies. Strategies for implementing BPA, including implementation planning, change management, testing, deployment, and maintenance of automated processes, are covered. Participants also learn how to evaluate the effectiveness of BPA using Key Performance Indicators (KPIs) and Return on Investment (ROI) calculations. Emerging technologies in BPA, including blockchain and machine learning, and ethical considerations associated with BPA are*

*also discussed. By completing the training program, participants gain knowledge and skills related to BPA, enabling them to identify and automate inefficient business processes, select appropriate BPA methodologies, and evaluate the effectiveness of BPA using KPIs and ROI calculations.*