

PROGRAM INTRODUCTION

In a career spanning thirty to thirty five years, the one year that signifies the transition from education to employment is most significant. Students need expert guidance on career choices to avoid long term setbacks. The IBM new-collar employability skills program is just what your students need to take the 'first step' with confidence.

IBM NEW COLLAR EMPLOYABILITY SKILLS PROGRAM

The program is a CSR Initiative of IBM in collaboration with NASSCOM Foundation. The objective of the program is to create greater employability opportunities for underserved youth by skilling them in specific job related future skills like **Data Science, Cloud Computing and Blockchain**. The program will be delivered on campus in colleges thru a blended format : e-learning plus classroom training. The training program will cover IT knowledge related curriculum along with life skills and functional English skills.

LEARNING JOURNEY MAP



At IBM, we believe that the future belongs to all of us, not just some of us. We're helping students of all ages build the skills of the future, enabling them to chart their own paths into new-collar jobs. Our programs like this one are shaping education an equipping young people with the academic, technical, and professional skills and credentials they need for the ever-evolving tech jobs.

Program Outcome

- ✓ Trainees are certified by IBM and made job ready
- ✓ Increased economic prosperity of the family
- ✓ Better jobs translating into consistent income
- ✓ Skilled manpower for the technology sector
- ✓ Meeting the growing workforce demand in new-age skills
- ✓ Helping colleges acquire a jump in their placement records

PROGRAM STRUCTURE

The curriculum is designed specially for students in the 2nd or 3rd year of graduation. There are 2 major courses on offer and students can select any one:

Course A: Data Science and **Course B: Cloud Computing**

Along with any of these two above electives the students will also be trained on **Blockchain Technology**

Duration of the course will be of 204 hours.

Apart from the technical courses, an employability skills module of 20-30 hours will also be taught

SALIENT FEATURES OF CONTENT

- Both Data Science and Cloud Computing have 3 subjects each
- Blockchain is the fourth common subject for both electives
- Each subject has 3 credits
- Two subjects in each elective have labs

Particulars	Description	Duration
Subject (Data Analytics/ Cloud Computing)	3 credits of 12 hrs each (3x3x12)	108 hrs
Labs	2 credits of 24 hrs each (2x2x24)	96 hrs
Blockchain		30 hrs
Soft skill/ Employability skill training		20-30 hrs
Total training duration		250-260 hrs

Steps for the Candidates



TECHNICAL COURSE OUTLINE

DATA SCIENCE

Introduction to Business Analytics

- Business Analytics and Optimization
- Data Warehouse
- Business Intelligence
- Data Mining
- Dashboard & Report Designing
- Big Data Analytics

Business Intelligence

- Introduction to Business Intelligence
- Elements of Business Intelligence Solutions
- Building BI Project
- Report Authoring
- BI Deployment, Administration and Security

Data mining & Predictive Modelling

- Introduction to Data Mining
- Data Understanding and Preparation
- Model development & techniques
- Model Evaluation and Deployment

CLOUD COMPUTING

IT Infrastructure Landscape Overview

- Database Overview
- Storage Overview
- Systems & Directory Services Overview
- Network Security and Overview
- Application and Middleware Overview

Cloud Computing Fundamentals

- Introduction to Virtualization
- Server, Storage, Network and Application Virtualization
- Introduction to Cloud Computing
- Cloud Implementations / Cloud Deployment Models, Cloud Delivery Models
- Case Study on Virtualization, Cloud Workloads

Cloud Computing Deployment Models

- Industry Trends and the Future of Cloud Computing
- Considerations for moving to cloud & Cloud Deployment
- Private Deployment Models
- Public Cloud Deployment Models
- Hybrid Cloud Deployment Models
- Cloud Open Standards and IBM Cloud Offerings

BLOCKCHAIN

- Introduction to Block Chain Technology
- Architecture of Block Chain technology
- Block Chain development concepts
- Hyperledger
- Use Cases for Blockchain technology usage in business