



# BCA WITH SPECIALISATION IN DATA ANALYTICS

**INDUSTRY-ENDORSED PROGRAM** 



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# MESSAGE FROM KEY LEADERS



This is the age of knowledge. And anyone who says "I do not know" at this age, will risk being labelled "outdated".

We at Amity Online Family have pledged to ensure no one faces that dilemma. That's why you will find Amity University Online going to the depths, the widths, the lengths to ensure we serve as many humans as possible.

Choices decide the fruits of your life. Taking up online programs with AUO is a wise decision to widen your opportunities to succeed.

**Dr. Priya Mary Mathew** Director, Academics



In the age of Industry 4.0, employability is a factor of attitude along with the knowledge and skills of learners.

Courses that are created with Industry participation to enhance in-demand skills in students is going to be a gamechanger for the entire Higher education landscape in India. It will also give wings to students to achieve their dream careers.

Krishnan CA
Business Unit Head, Higher Education, TCS iON



Amity University Online provides 'Anytime, Anywhere' education experience, intensive corporate interaction, industry-oriented teaching delivered by eminent corporate experts and world-class faculty.

Designed to suit both graduate students and working professionals, our programs adhere to UGC's stringent criteria and we are at par with the campus programs.

**Prof. Abhinash Kumar** Director

# ABOUT **AMITY UNIVERSITY ONLINE**

Amity University Online is devoted to creating a transformative learning environment, a digital classroom with true mobility and access to education from anywhere; inheriting Amity's vision of building the nation through education. Amity University Online is India's first university entitled by UGC to offer Master's, Bachelor's, Post Graduate Certificates and Certificate programs. These career-oriented programs are specially designed for working professionals offering futuristic learning experiences on our awarded LMS, along with face-to-face interactions, live sessions, webinars, video lectures & one-to-one session with faculty, designed and delivered by over 6000 eminent corporate experts and faculty.







#### **USA, UK & CANADA ACCREDITATIONS**



# **ABOUT TCS ION**

TCS iON, a strategic business unit of Tata Consultancy Services, is focused on enabling productive outcomes for educational institutions, government departments, organizations from multiple industry sectors and individual learners with the use of 'Phygital' platforms. These are the platforms that overlay digital technologies over physical assets. TCS iON delivers this with a unique IT-as-a-Service model that provides easy-to-use, secured, integrated, and hosted solutions in a build-as-you-grow and pay-as-you-use business model. TCS iON serves its clients with the help of best practices gained through TCS' global experience, domestic market reach, skills and delivery capabilities.

### **Enter your dream company with TCS NQT**

NQT is endorsed by 650+ top IT and non IT corporates in India including TCS. Successful learners from the above tests would be given access to jobs from pan-India corporates through TCS iON Job Portal. All eligible learners would be appearing in TCS iON National Qualifier Test (NQT) – Cognitive & Subject tests.

Learners are requested to note that NQT will be applicable for the students of BCA in semester 5.

#### Some of the companies part of 650+ corporates

























# ABOUT THE **PROGRAM**

#### **BCA (Data Analytics)**

This specialisation track would enable students to develop in-depth industry-ready knowledge and exposure to Data Science. This would cover the oceanic domain with indepth specialisation at each level, including data warehousing, modelling, mining, analytics, visualization & reporting. This track would enable students to work with data in all dimensions, including Big Data and also sharpen the skills to design a product including software & game development.



### **TESTIMONIAL**

Amity and TCS iON have helped me to strengthen my computer & information technology fundamentals as well as its applications in different domains. This program has enabled me to differentiate well between the various types of data and the requirements, to resolve a particular problem statement.

#### **Anil Sharma**

## COURSE CURRICULUM

#### Semester I

Basic Mathematics- I Core Courses

Business Communication VAC-Communication Skill

Computer and Information Technology Core Courses
Human Computer Interaction Core Courses

Programming in C Core Courses

#### Semester II

Data Structures Using C [Core Courses] Core Courses
Environmental Studies [Core Courses] Core Courses

Individual Excellence and Social Dynamic VAC-Behavioral Skill

Operating System Concepts Core Courses

Software Engineering and Modeling (UG) Syllabus Core Courses

#### Semester III

Introduction to Data Base Management Systems Core Courses

Computational Statistics Core Courses

Green computing Employability and skill enhancement

Network Basics Core Courses
Object Oriented Programming Using Java Core Courses

#### **Semester IV**

Unix Operating System and Shell Programming Core Courses

Python Programming Core Courses
Data Mining & Warehouse Specialisation E

Data Mining & Warehouse Specialisation Elective Courses
Usability Design for Software Application Specialisation Elective Courses

Data Analysis using Excel Specialisation Elective Courses

#### **Semester V**

Introduction to Artificial Intelligence Core Courses

Fundamentals of Ecommerce Employability and skill enhancement

Professional Ethics Value added course

Data Modelling & Visualization Specialisation Elective Courses

Data Analytics & Reporting Specialisation Elective Courses

#### **Semester VI**

Major Project [Non-Teaching Credit Courses] Non-Teaching Credit Courses

Big Data on Cloud Specialisation Elective Courses

Intelligent Game Design Specialisation Elective Courses

Design Thinking Specialisation Elective Courses

# PLACEMENTS & INTERNSHIP OPPORTUNITIES

Amity University, in collaboration with leading brand TCS iON, strives to make learners capable and excel in the real world. At Amity, we focus on providing the students with the best possible opportunities based on their performance and interest. These career opportunities are inclined to make students eligible for the most prominent corporates with appropriate salaries and designations.

### **Career Services for the students**

- Personality Development Program
- Communication Skills Program
- Mock Interview Workshop
- Resume Building Workshop
- Industry Internship Programs

#### 100% Placement Assistance:

- Placement opportunities will be open to all eligible learners from the IHP subject/courses.
   They would be appearing in TCS iON National Qualifier Test (NQT) Cognitive & Subject tests.
- In addition, Amity University Online will also provide placement support to all its online learners through regular on campus & virtual placement drives

## **Assured Internship Opportunities**

#### For BCA

The remote internship is provided to all the enrolled students twice during the program as per the following schedule:

After semester 4

Duration: 30 days | 125 hours

Additional Benefits: 50 hours in Industry Project

II. After semester 6

Duration: 45 days | 210 hours

Additional Benefits: 90 hours in industry project

**Note:** The process and criteria of selection will vary across corporates as per their HR policies and depending on the internship opportunity.

### **Key Differentiators**



Job visibility from pan-India corporates through TCS iON Job listing platform



Hands-on experience through Industry Assignments created by Industry experts



Industry endorsed
National Qualifier
Test (NQT) from TCS iON,
embedded in the program



Get hired by one of the top 650+ IT and non-IT corporates



75K+ job opportunities across 23+ industries, 120+ job roles on TCS iON Job listing platform



Average salary\*
Rs. 12.5 LPA (e.g. Data Engineer)
Rs. 20.4 LPA (e.g. Sr. Data Engineer)

<sup>\*</sup>Data stats taken from internal & external sources. Nobody or institute shall be held responsible for any data related incongruence or disagreement.

# **ACADEMIC FACULTY**



**Prof. Alka Choudhary**Ph.D Computer Science and Engineering



**Prof. Deepak Kumar** Ph.D Software Reliability, University of Delhi



**Prof. Sapna Sinha** Ph.D Computer Science



**Asst. Prof. Anil Kumar Sajnani**M.Tech Computer Science, Birla Institute of Technology

# INDUSTRY SUBJECT MATTER EXPERTS



Rakesh Yadav
Technical Lead-Analytics & Insights,
Tata Consultancy Services



Raju Pradhan
Technical Lead-Analytics & Insights,
Tata Consultancy Services



**Anjul Pathak**Technical Lead-Analytics & Insights,
Tata Consultancy Services



Sugato Samanta

Domain Consultant,

Tata Consultancy Services



**Arindam Gupta**Domain Consultant,
Tata Consultancy Services

# LEARNING **PEDAGOGY**

#### Digital learning resources

The content will be available in formats such as videos, ebooks as applicable.

#### 15 Digital Lectures per subject in a semester

- Delivered by academician(s) and industry expert(s) in a webcast or webinar format, spread across the entire duration of the course.
- The schedule will be published by TCS iON in advance.

#### Online forums (or communities) for enhancing collaborations with the SMEs

- Academic Connect community
- Industry Connect community
- Discussion Room

These are accessible for students from any device.

# **ELIGIBILITY**

#### For Students with Indian Education

- 10th Class Certificate (completing 10 years of formal schooling)
- 12th Class Certificate (completing 12 years of formal schooling)

#### For Students with Foreign Education

- O level Certificate (completing 10 years of formal schooling. Diploma will not be acceptable)
- A level Certificate (completing 12 years of formal schooling. Diploma will not be acceptable)
- Certificate of Equivalence from Association of Indian Universities (required by any student with foreign education to apply in any University in INDIA, refer to https://www.aiu.ac.in/)



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