

ONLINE
UG PROGRAM



AMITY
UNIVERSITY
ONLINE

BACHELOR OF COMPUTER APPLICATIONS

WITH A 14-WEEK PROFESSIONAL
CERTIFICATE IN **APPLIED
DATA ENGINEERING**

OFFERED IN ACADEMIC
PARTNERSHIP WITH



Get Industry Experience with Paid Internship.*



*Paid internship will be as per organization's norms or on first come first serve basis.

USA, UK & CANADA ACCREDITATIONS



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MESSAGE FROM **FOUNDER PRESIDENT**

Dr. Ashok K. Chauhan

Founder President,
Ritnand Balved Education Foundation (The Foundation of Amity
Institutions and the sponsoring body of Amity Universities)
Chairman, AKC Group of Companies

Amity is not just a group of institutions which imparts world-class education, but an experience where everyone associated is part of a dream, a mission to see that we nurture truly great leaders.

Today, we are proud that Amity is synonymous with practical, industry focused education, and attracts the best students. The fact that our alumni are working in the best companies across the world is a testament to our extremely talented faculty who inculcate, by example, in each student the spirit of dedication, sincerity and loyalty, and to all the corporates who support our mission with so much enthusiasm.

Each one of our students will be a success story. This is my dream; this is my commitment.



MESSAGE FROM **CHANCELLOR**

Dr. Atul Chauhan

Chancellor,
Amity University Noida

Amity Group of Institutions apart from imparting world-class education, also strives to inculcate good values, and ethics to build and groom the global leaders of tomorrow. We are creating centres of thought leadership across the world, where faculty, scientists, and brilliant students can explore and expand the frontiers of knowledge.

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ABOUT AMITY UNIVERSITY ONLINE

Amity University Online stands as a pioneering institution in the realm of digital education, breaking down barriers and providing access to millions worldwide.

Through our platform, we are democratising education, ensuring that regardless of geographical location or socio-economic background, individuals have the opportunity to pursue knowledge and skills vital for their personal and professional growth.

Our commitment to inclusivity and innovation drives us forward, as we continue to expand access to high quality education in the digital age.



Amity University Online, today, offers the largest number of approved online degrees to the largest number of online students across India, reflecting Amity's commitment towards empowering our youth through world-class education, who in turn will ensure a Viksit Bharat.



Years of Excellence



1.60 Lac+

Learners



60+

Programs and Specializations

INDIA'S FIRST UNIVERSITY TO GET APPROVAL TO OFFER ONLINE DEGREES

Post the University Grants Commission (Online Courses or Programs) Regulations, 2018

60+ PROGRAMS AND SPECIALIZATIONS: Bachelors • Masters



MESSAGE FROM
CHAIRMAN

Mr. Ajit Chauhan

Chairman,
Amity University Online

In today's fast-paced and interconnected world, the pursuit of knowledge has never been more accessible. Amity is committed to providing you with a world-class education that transcends geographical boundaries. Whether you are a working professional seeking to advance your career, a dedicated lifelong learner, or someone taking your first steps into higher education, our digital platform is designed to accommodate your needs and aspirations.

As the landscape of education evolves, so do we. Our esteemed faculty, staff, and state-of-the-art technology are here to support your educational journey. From interactive online programs and courses to digital libraries and academic forums, you'll have access to a wealth of resources that will enhance your learning experience.

At Amity, we're not just preparing you for a career; we're empowering you to make a positive impact on this world. So, whether you're ready to take the next step in your career or explore new horizons, we invite you to join us at Amity University Online and embark on a journey of discovery and growth.



MESSAGE FROM **VICE CHANCELLOR**

Prof. Dr. Balvinder Shukla

Amity University, Noida

Amity University Online epitomizes an unwavering pursuit of excellence, cutting-edge innovation, and transformative learning. Rooted in knowledge, research, and comprehensive education, your learning journey at Amity Online is tailored to transcend knowledge barriers and shape your destiny.

At Amity Online, we embrace a legacy of brilliance that empowers you with industry-centric skills, knowledge and expertise to achieve success confidently through lifelong learning and values.



MESSAGE FROM **DIRECTOR**

Prof. Abhinash Kumar

Amity University Online

Amity University Online provides 'Anytime, Anywhere' educational 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.



MESSAGE FROM **DIRECTOR-ACADEMICS**

Ms. Monica Agarwal

Amity University Online

Amity University Online is dedicated to redefining education through innovation and excellence. Our meticulously crafted programs cater to the dynamic needs of learners, equipping them with industry-relevant skills and an unwavering commitment to growth.

Our aim is to inspire curiosity, ignite potential, and deliver a learning experience that goes beyond the ordinary. Therefore we focus on academic excellence, innovation and holistic development which creates a pathway for success, achievement, and lifelong impact.

ABOUT **KPMG INDIA**

KPMG entities in India are professional services firm(s). These Indian member firms are affiliated with KPMG International Limited. KPMG was established in India in August 1993. Our professionals leverage the global network of firms, and are conversant with local laws, regulations, markets and competition. KPMG has offices across India in Ahmedabad, Bengaluru, Chandigarh, Chennai, Gurugram, Hyderabad, Jaipur, Kochi, Kolkata, Mumbai, Noida, Pune, Vadodara and Vijayawada.

KPMG entities in India offer services to national and international clients in India across sectors. We strive to provide rapid, performance-based, industry-focused and technology[RL1]-enabled services, which reflect a shared knowledge of global and local industries and our experience of the Indian business environment.





MESSAGE FROM

PARTNER

**Dr. SANKARAN
VENKATARAMANI**

Partner, Corporate Services, BE
KPMG India Amity University Online

At KPMG, we believe in the transformative power of education to drive innovation and change lives. Our partnership with Amity Online underscores our commitment to delivering exceptional learning experiences that prepare professionals for the challenges and opportunities of the digital economy. Through our collaboration with Amity Online, we offer flexible, self-paced learning options that fit seamlessly into the busy schedules of professionals. Learners can progress at their own pace, balancing their studies with work and personal commitments. With our online platform, learners can access course materials from anywhere in the world, making it easier than ever to pursue professional development.



MESSAGE FROM

ASSOCIATE PARTNER

Mr. CHINMAY PRADHAN

Associate Partner, Corporate Services,
BE, KPMG India, Amity University Online

We are excited to announce an innovative collaboration between KPMG and Amity Online, aimed at providing cutting-edge, self-paced learning programs in Business Analytics, Python, Data Visualization, Excel, and Big Data. This partnership represents a significant step forward in our commitment to offering high-quality, industry-relevant education that empowers professionals to excel in the digital age. Our programs are designed by seasoned professionals who bring a wealth of real-world experience and industry insights. This ensures that learners gain practical knowledge that can be immediately applied in their careers. We stay ahead of the curve by continuously updating our course content to reflect the latest trends, tools, and technologies in the industry.

ABOUT PROGRAM

BACHELOR OF COMPUTER APPLICATION

WITH A PROFESSIONAL CERTIFICATE IN APPLIED DATA ENGINEERING

LEARNING EFFORTS: 12/15 HRS A WEEK

DURATION: 3 YEARS | **CREDITS:** 127

ACCELERATE YOUR CAREER SUCCESS WITH AMITY'S ONLINE BCA WITH A PROFESSIONAL CERTIFICATE IN APPLIED DATA ENGINEERING

This program is a 3-year (6 semesters) undergraduate program that offers the best of both worlds—core computer applications and advanced data engineering skills.

From Semester 3 onwards, students undertake the 60-hour Professional Certificate in Applied Data Engineering, developed in collaboration with KPMG. The certificate is designed for future-ready tech professionals looking to master real-world tools, technologies, and problem-solving capabilities in the field of data engineering.

This dual-track curriculum integrates foundational programming, database management, and networking from the BCA program with specialized learning in Python, data pipelines, big data tools, cloud technologies, and IoT- ensuring that graduates are equipped to thrive in today's fast-evolving tech ecosystem.



PROGRAM CURRICULUM

SEMESTER 1

- Basic Mathematics- I
- Computer and Information Technology
- Programming in C
- Human-Computer Interaction
- Business Communication

SEMESTER 3

- Introduction to Data Base Management Systems
- Computational Statistics
- Network Basics
- Object Oriented Programming Using Java
- Green computing
- **Begin your path to industry certification from Semester 3**

SEMESTER 5

- Introduction to Artificial Intelligence
- Fundamentals of Ecommerce
- Professional Ethics
- Data Warehousing and Mining
- Internet of Things
- Introduction to Enterprise Resource Planning

SEMESTER 2

- Data Structures Using C
- Environmental Studies
- Operating System Concepts
- Software Engineering and Modeling
- Individual Excellence and Social Dynamic

SEMESTER 4

- Unix Operating System and Shell Programming
- Python Programming
- Cyber and Information Security
- Fundamental of Cloud Computing and Enterprise
- Fundamentals of Digital Marketing
- IT Project Management

SEMESTER 6

- Major Project
- Blockchain Technologies
- Human Resource Management
- Introduction to Data Science
- Introduction to e-Governance

ELIGIBILITY

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

PROFESSIONAL CERTIFICATE CURRICULUM

Python Packages and Syntax for Data Engineering

- Jupyter Notebook setup and Python packages
- Handling lists and dictionaries
- Importing data from Excel and CSV files
- Data exploration with Python functions ... and more.

Machine Learning using Python

- Data wrangling and preprocessing
- Linear regression, SVM, and decision tree regressors
- Logistic regression, decision trees, and ensemble methods
- Model evaluation with confusion matrix, precision, recall, and F1-score ... and more.

NLP and Web Scraping

- Web scraping with BeautifulSoup
- Automating scripts for data extraction
- NLP libraries, Text Feature Engineering (unigram, bigram, TF-IDF)
- Sentiment analysis and document classification ... and more.

Data Visualization using Tableau

- Introduction to Tableau and Data Types
- Chart plotting and customization
- Filters: top-bottom, dynamic, and global
- Data cleaning and live/extract connections ... and more.

Big Data Engineering

- Basics of Hadoop (HDFS, YARN)
- MapReduce and Sqoop
- Hive, Impala, and Apache Spark concepts
- RDDs, Spark SQL, and application optimization ... and more.

IoT Fundamentals and Application

- IoT Basics and Benefits
- Data Pipelines and Cloud Computing
- Azure IoT Hub Setup and Features
- Device SDK Configuration ... and more.

KEY HIGHLIGHTS



Industry-relevant Skills

Real-world professional experience through an internship*.



Python Programming

Manipulate data structures and perform analysis.



Machine Learning Techniques

Build and evaluate models using regression and classification.



Web Scraping

Extract and automate data collection from web sources.



NLP Applications

Engineer text features and build sentiment analysis models.



Data Visualization

Design and refine dashboards using Tableau.



Big Data Proficiency

Manage and process data using Hadoop and Spark.



IoT Implementation

Configure IoT devices and use Azure IoT Hub.

OUR ACCREDITATIONS AND RECOGNITIONS

Endorsements of Academic Quality and Excellence



**ONLINE MBA
RANKINGS
2024**

**INDIA'S ONLY
ONLINE MBA RANKED
Asia Pacific Top 10**



First university in India to receive UGC approval for Online Degrees and Learning Platform



The Western Association of Schools and Colleges



Ranked 35 by National Institutional Ranking Framework



Ranked among Top 3% Globally



Degree programs approved by All India Council of Technical Education



WES accredited in Canada



India's first private university to be a member



AMITY UNIVERSITY ONLINE ADVANTAGES

Top-Notch Online Learner Experience



Top International Faculty

Lectures delivered by top international faculty offer captivating insights with a global perspective



AI-ProfessorAMI

AI-PROF. - AMI, powered by Chat-GPT 4 and Open AI Tech for 24/7 Doubt Clearing and Support



Diverse learning mediums

Diverse Learning options through recorded lectures, audio books, physical books, e-books and more



Interactive faculty sessions

Engage in a dynamic learning environment with our continuous faculty interaction and dedicated doubt-clearing sessions



Career services and placement assistance

Career services and placement assistance with 500+ hiring partners ensuring opportunities for professional growth



Remote proctored exams

Take exams with ease, integrity and convenience from the comfort of your own space



1:1 industry mentorship

Elevate your skills and career prospects with tailored insights, cultivating a pathway to professional success



Pan-India Campus Access and Offline Events

Enjoy access to all Amity campuses for events like orientation, mid-year meetups, on-campus connect and convocation - blending digital convenience with real-world connection.



Amigo: Learning On-the-Go

The Amigo app makes learning seamless and mobile - attend live classes, track progress, access materials, and more on your schedule.



Industry Certifications for Better Employability

Gain an edge with in-demand certifications from top industry bodies and partners - integrated within your program to boost your skills and CV.



Internship Opportunities

Access curated internships with leading companies through our corporate network, helping you gain real-world experience and stand out in the job market.



beSocial App for Campus Life

Your virtual student hub - the beSocial app lets you network, join clubs, attend events, and be part of a vibrant, online-first community.

CAREER SERVICES

PREPARING YOU TO BECOME JOB-READY

Amity University Online is committed to enhance your employability by helping you become industry ready. From skills assessments and resume building workshops to mock interviews and placement drives, we provide a range of services to help you succeed. Our goal is to ensure that you are matched with the perfect job that aligns with your aspirations.



Empowering Learners with 1,00,000+ Job Opportunities

ON CAMPUS **EXPERIENCE**

EXTENSIVE INTERACTION WITH **FACULTY AND PEERS**

- Campus orientation for new learners in all the Amity University campuses
- Last-minute revision classes at select Amity University campuses
- Transformative learning through guest lectures on campus
- Access to library and programming labs on the campus
- Exam preparation classes
- Access to campus events



ALUMNI WORKING AT



CORPORATE SPEAK

“ I am delighted to share my positive experience with Amity Online regarding the smooth and efficient conduct of our recent recruitment drive. I must commend the team at Amity Online for their professionalism, dedication, and innovative approach that made the entire process seamless and effective. ”

ANKIT TANDON
Director, HCLTech

“ It was a great experience interacting with Amity Online students today. The quality of the students was impressive, and their skill set was at par with our expectations. What impressed us most was their ability to manage multiple responsibilities simultaneously. They are ambitious and will only push the bar higher in the coming times. ”

SRIRAM
Head HR, TCS iON

“ The hiring experience was nice as we got splendid support from the faculty to provide us with the talent pool. The career services team was of great assistance in providing us with all the requested details of the candidates and that too in the form that we wanted, which is very much appreciated as it made the process easy for us. ”

SAKSHAM BHARDWAJ
Senior Executive, HR Operations, Foxconn

FAQs

1. What is the BCA with Professional Certificate in Applied Data Engineering program?

It is a 3-year online undergraduate program combining core computer application skills with advanced data engineering knowledge, designed to make you future-ready for IT and data-centric careers.

2. What will I learn in this program?

You will learn programming, database management, software development, data pipelines, big data processing, cloud computing, and data visualization, along with applied projects and tools.

3. Who is this program ideal for?

This program is ideal for aspiring software developers, data engineers, IT professionals, and students aiming for careers in tech and data-driven industries.

4. What are the key tools and technologies covered?

The program covers Python, SQL, Power BI, Hadoop, Spark, Google Cloud, Apache Airflow, and various tools for data processing and visualization.

5. Is this program recognized globally?

You will be awarded a UGC-entitled Bachelor of Computer Applications (BCA) degree from Amity Online, along with a Professional Certificate in Applied Data Engineering which is offered in academic partnership with KPMG.

6. Is the program fully online and flexible?

Yes, it is 100% online with live sessions, recorded lectures, and self-paced learning options designed to suit working professionals and full-time students.

7. What is the eligibility for BCA with Professional Certificate in Applied Data Engineering?

Candidates must have completed 10+2 (or equivalent) from a recognized board to be eligible for admission.

8. Does the program offer placement assistance?

Yes, Amity Online provides dedicated career support, including placement assistance, resume-building, interview preparation, and access to a wide network of recruiters.

9. What is the admission process for this program?

The admission process is fully online. Simply fill out the application form, upload required documents and pay the registration fee. After verification, you will receive admission confirmation.

10. What are the career opportunities after this program?

You can pursue roles such as Data Engineer, Software Developer, Big Data Engineer, Cloud Data Specialist, Database Administrator, and more.

OTHER ONLINE PROGRAMS OFFERED

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BBA

BA

MCA

B.COM

BAJMC

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MAJMC



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