# COLLEGE CONTACT





9422224440



https://forms.epravesh.com/ NewArtsCollege/



New Arts, Commerce & Science College, Ahmednagar – 414001





### **B.Sc.** in Data Science

Learn data analysis, machine learning, AI, and big data technologies with hands-on projects.

## **B.Sc. in Cloud Computing**

Master virtualization, cloud platforms like AWS/Azure, and modern IT infrastructure skills.

## **B.Sc. in Computer Science**

Build strong foundations in programming, software development, and systems design



COMMERCE AND SCIENT

CASAS - 2025-26

NEW ARTS, COMMERCE AND SCIENCE COLLEGE, AHMEDNAGAR (AUTONOMOUS)

> Center for Advanced Studies in Applied Sciences



# KEY FEATURES OF CASAS

# 01 Advanced Learning Programs:

Cutting-edge curriculum aligned with industry trends.

# 02 Expert Faculty & Mentorship:

Personalized guidance from experienced educators and professionals

# 03 Research & Innovation:

Hands-on exposure to IT projects, hackathons, and seminars.



Collaborations & Internships

# WAY CHOOSE CASAS ..?



NAAC 'A++' Accredited and UGCrecognized as a College with Potential for Excellence.

ISO Certified Institution ensuring high-quality education standards.

Modern Campus with advanced labs, digital classrooms, and e library.

Placement Support with strong industry connections and job training.

Active Student Life through NSS, NCC, cultural forums, and research clubs.

- Skill-Building Activities like seminars, workshops, hackathons, and conferences.
- Dedicated Faculty & Mentorship fostering academic and personal growth.

"DON'T MISS THE OPPORTUNITY TO SHAPE YOUR FUTURE WITH CASAS. JOIN THE TECH REVOLUTION IN EDUCATION!"





#### AJMVPS'S



# New Arts, Commerce and Science College, Ahmednagar (Autonomous)



## **About College:**

New Arts, Commerce & Science College, Ahmednagar was established in 1970 by the Ahmednagar Jilha Maratha Vidya Prasarak Samaj (AJMVPS) with a vision to make quality higher education accessible to rural and urban students alike. Affiliated with Savitribai Phule Pune University, the college has emerged as one of the leading multi-disciplinary institutions in Maharashtra.

## **\$ Accreditation & Recognition:**

- NAAC Accredited with 'A+' Grade
- Recognized as a College with Potential for Excellence (CPE) by the UGC
- ISO certified institution.

#### **♦** Academic Excellence:

- Offers more than **32 UG and PG programs** across Arts, Commerce, and Science streams
- Hosts several Ph.D. research centers and skill development courses
- Strong focus on industry-integrated education, research, and social responsibility

### **♦** Campus & Facilities:

- Spread across a large green campus with modern amenities
- State-of-the-art computer labs, science laboratories, library, and digital classrooms
- Sports facilities, hostels, student counselling, and placement cells

## **♦ Student Development:**

- Active participation in NSS, NCC, cultural forums, and research clubs
- Regular seminars, workshops, hackathons, and international conferences
- Dedicated Center of Advanced Studies in Applied Sciences to promote innovation in emerging fields

# **Centre of Advanced Studies in Applied Sciences (CASAS)**

"Education for Enrichment, Empowerment, and Excellence"

**CENTER FOR ADVANCED STUDIES IN APPLIED SCIENCES (CASAS)** was established by college in year 2022 to offer education in computational and applied sciences under one roof with institutional vision and mission.

This centre is a prestigious hub for cutting-edge technology training and interdisciplinary collaboration.

Continues support and motivation of our Trust (*Sanstha*), able mentorship of Professor Ajit Jaokar, Oxford University, London and academic support provided by *Garje Marathi Global Foundation*, *USA* altogether helping us to bloom and nurture the center.

As on date, 07 under graduate and post graduate academic courses run under umbrella of CASAS, viz. B.Sc. (Computer Science), M. Sc. Computer Science, BCA, M. Sc. Computer Applications, B.Sc. (Data Science), B.Sc. (Cloud Computing) and B. Voc. (Printing Technology).

In a span of 03 years, CASAS implemented new job-oriented and innovative academic programs under guidance of Sanstha and college administration.

The center professionally completing admission process by conducting entrance examination and attracting and admitting meritorious students for all the academic programs from across the state.

Presently 1207 students studying at graduation level while 149 students are studying at post-graduation level in the center. The center also established strong linkages with national and international academic and industrial expert and also trying to provide online as well as offline sessions on the cutting-edge technologies. The experts' sessions not only providing on industrial demand-oriented education but also training college teaching staff. The laboratories established by the college are equipped with all the necessary set-up. The on-job training sessions and internship session organized with the help of *Garje Marathi Global Foundation*, *USA* provided international platform to our students in the last academic year.

The primary objective of this center is to bridge the gap between academic learning and industrial requirements, enhancing the employability and skills of our students in computational sciences.

### **HIGHLIGHTS:**

## **☐** Computer Lab Infrastructure

- ♦ High-speed broadband & advanced PCs
- ♦ Virtualization tools, cloud access
- Licensed software, UPS backup
- **♦** Real-time lab sessions & project work

## **♦** Why Choose Us?

- Modern, industry-aligned curriculum
- Limit Experienced, research-driven faculty
- Internship & placement guidance
- \*\* National/international academic partnerships
- **%** Tech fests, coding clubs and innovation cells

## Admissions Open for academic year 2025–26

**Campus:** New Arts, Commerce & Science College, Ahmednagar − 414001

**Complex (19) Phone:** [9422224440, 9423793223, 9403710000, 9960976687]

**Email:** casas@newartsdcs.ac.in

**WELL FOR ORDING APPLICATION FOR THE EXAM:** 

 $\underline{https://forms.epravesh.com/NewArtsCollege/}$ 



Learn • Innovate • Lead — with Ahmednagar's most trusted institute for science and technology.

# **Courses in CASAS at glance**

# **B. Sc. Cloud Computing**



- C
- Java
- Python etc
- Cloud Types
- Cloud Services
- Cloud Service Providers (AWS,Google Cloud, Microsoft Azure)
- Cloud architechture, security etc
- Database Management Systems(SQL)
- Handling of Big Data-Hadoop
- Pig, Hive, Hbase, Spark etc
- Devops

# **Job opportunities**

Job Role	Description
Cloud Architect	Designs and builds scalable, secure, and cost-effective cloud
	infrastructures, ensuring alignment with business objectives and
	performance needs.
Cloud Engineer	Manages the deployment, monitoring, and maintenance of cloud
	platforms, ensuring cloud services run smoothly and optimizing
	resources.
Cloud Security Engineer	Implements security measures, conducts risk assessments, and ensures
	compliance with regulations to protect cloud data and applications.

Cloud DevOps Engineer	Combines development and IT operations to streamline the delivery of
	cloud-based applications using automation tools and practices for
	CI/CD pipelines.
Cloud Data Engineer	Builds and manages cloud-based data systems, optimizing data storage
	and enabling easy access for analytics and business intelligence.
Cloud Solutions Architect	Designs and implements tailored cloud-based solutions for business
	needs, leveraging cloud technologies to provide cost-effective and
	innovative results.
Cloud Systems	Manages daily operations of cloud systems, monitoring performance,
Administrator	handling configurations, and ensuring uninterrupted service.
Cloud Database	Manages cloud databases, ensuring scalability, reliability, security, and
Administrator	handling optimization, backup, and recovery processes.
Cloud Network Engineer	Designs and manages the networking components of cloud
	infrastructure, ensuring secure and efficient data transmission across
	cloud networks.
Cloud Support Engineer	Provides technical support, troubleshooting cloud-based issues,
	assisting with configurations, and ensuring smooth operation of cloud
	services.

Job Role	Average Salary in India per year
Cloud Administrator	7 LPA
Cloud Engineer	6 LPA
Cloud Developer	10 LPA
Cloud Support Engineer	8 LPA
System Administrator	5 LPA

# **B.Sc. Data Science**

# Mathematical Foundaton

- Discrete mathematics
- Calculus
- Operations Reasearch

# Statistical Foundation

- Probability
- Discrete and Continous Probability
- Time series Analysis
- Statistical Inference
- Multivariate Analysis

# Computational Foundation

- •Programming Languages
- •Core concepts-
- 1. Data Structures
- 2. Object oriented Concepts
- 3. Database Management Systems.
- •Distributed Database Management Systems

#### Data Sciecne Foundation

- •Funamentals of Data
- •Tools to handle data-Excel, R
- •Artificial
  Intelligence conepts
  from basic to
  advance
- •Machine Learning
- •Deep Learning
- •GPTs(Generative Predictictive Models
- •Natural Language Processing
- •Devops

Job Title	Job Role	Responsibilities	Average Salary in
			India per year
Data Architect	This is one of the highest- paying data science jobs. Data architects collect, modify, and	A data architect handles responsibilities like:	₹4 – ₹7 LPA
	maintain large-scale databases and data infrastructures. They make sure this information is available to the users exactly when they need it.	Designing and optimizing database structures. Ensuring the integrity of data is maintained. Keeping sensitive information safe & secure. Collaborating on data	
		strategy initiatives.	
AI Engineer	AI Engineers focus on developing artificial intelligence models that simulate human thinking and behavior.	Their roles and responsibilities cover:  Build AI systems and machine-learning applications.  Working on Python, TensorFlow, and LLMs. Automate repetitive tasks to improve efficiency.  Monitor AI systems for performance and accuracy.  Collaborating with DevOps team members to provide performance updates and cloud solutions	₹5 – ₹10 LPA

Quantitative Analyst	The third most high-paying job is of a Quantitative Analyst. Quantitative analysts apply mathematical models to assess financial risks.	Develop financial models. Analyze market trends. Manage investment risks.	₹4.5 – ₹8 LPA
Data Engineer	Data Engineers manage and prepare data for analytical or operational uses. They build and maintain pipelines for data collection and processing.	Major duties and areas of responsibilities are as follows:  Design and develop scalable data solutions.  Maintain and improve data quality.  Optimize data workflows.	₹5 – ₹10 LPA
Data Scientist	A data scientist uses data to help businesses make better decisions. How do they do so? By combining skills from statistics, programming, and their domain knowledge.	As a data scientist, you must:  Analyze patterns and trends to identify business opportunities. Interpret complex data and present it in simple insights that help decision-makers understand what actions to take. Use predictive analysis to predict future outcomes. It can be a threat, risk, or opportunity.	₹5 – ₹8 LPA
Machine Learning Engineer	Machine learning is an indemand field and is expected to grow to \$750 billion in the next decade. Which is why the demand for ML engineers is also on the rise. But what do ML engineers do?  Machine Learning engineers create algorithms that copy human minds and make decisions. Suppose you feed past sales data of 5 years to an ML module. Using that data it will predict what will be the future sales trends. Will your sales go up or down?	Design machine learning models that can learn from data.  Use historical data to teach the model to make predictions.  Test algorithms for performance and accuracy.  Deploy AI-based solutions to solve complex problems.	₹6 – ₹12 LPA

Big Data Engineer	Unlike data scientists who work mostly on statistics, maths, analysis, and insights, Data engineers focus on the infrastructure and tools needed to store, process, and manage this extensive data set of your business	Build a pipeline for data collection and processing. Improve the performance of big data systems. Work on Hadoop, MongoDB, Spark, and other technologies. Gather insights for decision-making. Real-Life Applications: E-commerce, healthcare, and finance	₹6 – ₹12 LPA
Research Scientist	Research Scientists focus on conducting experiments and studies to find new ways to improve technology, especially in AI and machine learning.	Conducting lab-based experiments. Publishing research findings and making reports. Owning the quality of data generated from experiments	₹3.5 – ₹6 LPA
Statistician	The data scientist vacancy for the statistician is about to grow by 11% by 2033. That's much faster than any other occupation	Develop statistical models for data analysis. Identify patterns and trends in data sets. Interpret data to solve business problems.	₹3.5 – ₹6 LPA
Business Intelligence Analyst	Business Intelligence Analysts use data to help companies understand trends and make data-backed decisions. This can be sales trends, marketing trends, or anything.	Analyze and interpret business data. Create reports and dashboards. Identify patterns and forecast trends.	₹4.5 – ₹8 LPA
NLP Engineer	Understanding GenZ slangs Gaining knowledge of multiple spoken languages Translating information and data. Real-Life Applications: Media, Customer Service, Finance	Develop tools for speech recognition and text analysis. Test NLP models for accuracy. Implement natural language interfaces.	₹5 – ₹9 LPA

# **B.Sc. Computer Science**

The **B.Sc. Computer Science** program is a 3-year undergraduate course designed to provide a strong foundation in the theoretical and practical aspects of computing and technology. It equips students with essential programming skills, software development knowledge, and an understanding of computer systems and networks.

## **Course Curriculum Highlights:**

#### • Year 1:

- o Programming fundamentals using Programming in C
- Digital Electronics
- Mathematical Foundations and Statistics for Computer Science

### • Year 2:

- Data Structures & Algorithms
- Database Management Systems (SQL, PL/SQL)
- o Operating Systems and Software Engineering

### • Year 3:

- Java Programming, Web Technologies
- Foundation of Data Science
- o Computer Networks, IoT, Information Security
- Project Work & Internship (Industry-Based)

The curriculum also includes practical labs, mini-projects, seminars, and soft-skill training to enhance job readiness.

Job Title	Job Role	Key Responsibilities	Average Salary in India per year
Software Developer		- Write and test code - Debug programs - Collaborate with UI/UX and backend teams	₹4 – ₹8 LPA
Mah Hayalanar	wen anniications	- Develop front-end and back-end code - Ensure site speed and performance - Fix bugs	₹3.5 – ₹7 LPA
	Manages computer systems and networks in an organization.	- Monitor and maintain servers - Install updates and patches - Troubleshoot network issues	₹3 – ₹6 LPA
Database Administrator	land data integrity	- Create and manage databases - Ensure data security - Backup and restore operations	₹4.5 – ₹9 LPA

Job Title	Job Role	Key Responsibilities	Average Salary in India per year
11 -	and data breaches	- Monitor network traffic - Identify vulnerabilities - Respond to security incidents	₹5 – ₹10 LPA
	resolves hardware/software issues	- Answer tech queries - Configure hardware/software - Maintain documentation	₹3 – ₹5 LPA
_	Tests software to ensure quality and functionality.	- Write test cases - Report bugs - Ensure product meets requirements	₹3.5 – ₹6.5 LPA
	llicere in companie	- Diagnose software/hardware faults - Install applications - Support ticket management	₹3 – ₹4.5 LPA