# Get an Online certified Degree in NCA Specialization: Artificial Intelligence



## Mission

To provide value-based education and mould the character of the younger generation through a system of wholesome learning, so that their earnest endeavor to achieve progress and prosperity in life is matched by an ardent desire to extend selfless service to society, one complementing the other.

## Vision

We envision a world endowed with the wealth of knowledge and strength of discrimination (Viveka). We envision a system, which is a healthy breeding ground for the sprouting, culturing and dissemination of the whole gamut of knowledge in a wholesome and holistic manner for the well-being of mankind. We envision a human being empowered with wholesome knowledge, which makes him an enabler and facilitator in the deep search and striving of every human being for that knowledge. We envision a system where in there is a great interplay and exchange of ideas, thoughts, feelings and actions which develop people empowered with noble character, and wholesome value. They go out in to the fields of action to build a world of love, harmony, peace and knowledge. They follow the path of Dharma and give a clear direction in every thought and human behaviour.



#### **Our Chancellor**



There are two types of Education **Education** for **Living**. **Education** for **Life**.

Sri Mata Amritanandamayi Devi

"Studying is a process, like the bud unfolding into the beautiful fragrance spreading flower. Understanding this, we should approach our topic of study with love and patience. Knowledge is like a river. Its nature is to constantly flow. Wherever it can flow, it does so, nourishing culture. On the other hand, the same knowledge, if devoid of values becomes a source of destruction for the world. When values and knowledge become one, there can be no more powerful instrument for the welfare of humankind. There are two types of education: education for a living and education for life. When we study in college, striving to become a doctor, a lawyer, or an engineer, that is education for a living. But education for life requires a deeper understanding of the world, our minds, our emotions and ourselves. Amrita University provides education for life which is much more than education just for living."







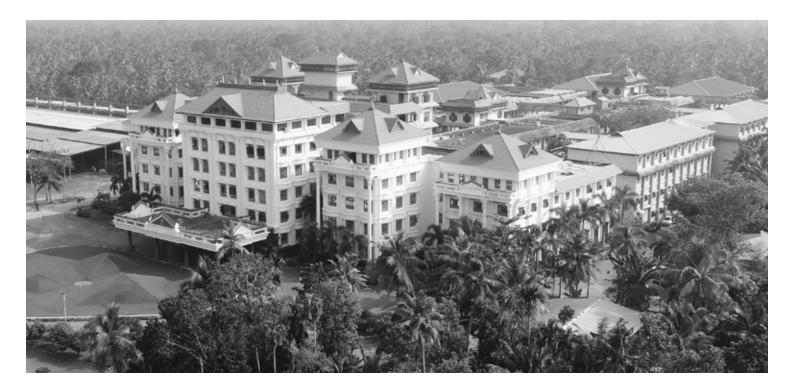


**Institution of Eminence** Recommended by University Grants Commission



## **University Rankings**





## Amrita Vishwa Vidyapeetham at a Glance

Amrita Vishwa Vidyapeetham is a multi-campus, multi-disciplinary research academia that is accredited 'A' by NAAC and is ranked as one of the best research institutions in India. Amrita is spread across six campuses in three states of India - Kerala, Tamil Nadu and Karnataka, with the headquarters at Ettimadai, Coimbatore, Tamil Nadu. Amrita Vishwa Vidyapeetham continuously collaborates with top US universities including Ivy league universities and top European universities for regular student exchange programs, and has emerged as one of the fastest growing institutions of higher learning in India.

"Amrita Vishwa Vidyapeetham has a major role to play in transforming our society into a knowledge society through its unique value-added education system."

Dr. A.P.J. Abdul Kalam Former President of India

"This is not just another academy, but very high quality, world-class institution, focusing on technology research, dealing with very concrete issues which have immediate applications."

Prof. Muhammad Yunus Nobel Laureate

"What makes Amrita students special? Western science leads to knowledge. Eastern science leads to understanding. Amrita has both Western and Eastern traditions in education."

Dr. Lee Hartwell Nobel Laureate



Amrita Ahead's Online Degree programs focuses on an all-rounded individualized learning trajectory to enhance and diversify one's career growth pathways while integrating Amrita's philosophy of 'Education for Life and Education for Living'. Innovative and award-winning pedagogic practices provide experiential learning allowing freshers and working professionals anytime access and flexibility with personalized mentorship and interactivity. Our AICTE recognized future-ready degree programs are offered jointly with Industry stalwarts, reputed national and international faculty that equip and expose students to address real-life applications.

# Online Our MCCA Also Specialization: Artificial Intelligence

Our online Masters in Computer Application with a focus on Artificial Intelligence is a 2-year postgraduate online MCA programme with a specialization in Artificial Intelligence. The program is designed to groom technically sound professionals in advanced learning systems & methodologies based on the algorithms of Artificial Intelligence.

This programme is hands-on and follows an industry mentored curriculum which equips its students with applicable knowledge in cutting edge technologies.



# How to earn a degree on Amata Structure of Amata St

#### **Choose a Degree**

Choose a degree ranging from Undergrad to Master's programs.





## Learn Anytime Anywhere

Earn credits towards your degree wherever you are- you just need a smartphone, tablet or computer and access to the internet

#### Ace the Assessments

(+)

Complete online assignments to get feedback and demonstrate your understanding.



#### Earn your degree

Complete the requirements and gain an internationally recognised qualification.

# **Course Duration**»

Limits	No. of years	
Minimum	2	
Maximum	4	

# **Curriculum**»

## Semester 1 MCA AI

Foundations of Computer Systems

Mathematical Foundations for Computer Applications

Essentials of Cybersecurity

Elective I

Elective II

Elective III



Data Structures and Algorithms

**Mathematics Elective** 

Cloud Computing

Elective IV

Elective V

Elective VI

## Semester 3 MCA AI

Software Project Management

Research Methodology

Elective VII

**Elective VIII** 

Elective IX

Elective X

**Minor Project** 



Project

Elective XI



## **Industry relevant Electives**

(Training to earn Amazon certification and badges)

#### **Industry Certification Training**

- > IBM Practitioner
- > Amrita Ahead is currently offering courses from Coursera and SWAYAM NPTEL.

#### **Other Industry-relevant Electives**

- > Foundations of Machine Learning
- > Natural Language Processing
- > Business Analytics and Visualization
- > Deep Learning for Al
- > Computer Vision
- > Complex Network Analysis
- > Data Engineering for AI
- > Reinforcement Learning
- > IoT for AI
- > Artificial Intelligence
- > Artificial Intelligence for Robotics
- > No-SQL Databases
- > Applications of Machine Learning
- > Web Analytics
- > Computational Statistics
- > AI for Drug Discovery and Target Validation
- > Representation Learning
- > Medical Signal Processing
- > Applied Predictive Analytics
- > Data Visualization

#### **Industry-relevant tools**

Courses offer hands-on sessions using industry relevant Artificial Intelligence and Data Science Python packages such as SciPy, Scikit-Learn, sympy, matplotlib, NLTK, BERT. Hands-on sessions integrated into courses include Tensor flow, Tableau, Keras, Anaconda, RDBMS: SQL; Apache Spark ; SPARKQL; SPARKML, PySpark and complex networks tools like Gephi/NetworkX.

#### **Industry-ready training**

Interact with International (Germany, USA) and National Artificial Intelligence specialists on course modules and Industry-led projects with 50+ case studies.

## Mentored industry-relevant projects (Final Semester)

In areas of Machine Learning, NLP, Computer Vision, Deep Learning, Cloud Computing & Distributed Computing, Block chain, IoT.

#### **Online Practical Virtual Labs**

From Amazon AWS, CISCO Academy, and Amrita.



#### Live Sessions - 1 hour per week per course

#### **Reading material & video lectures**

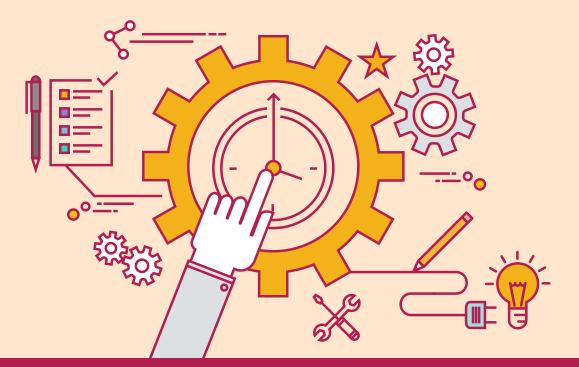
Uploaded every week prior to the live session

#### **Discussion forums**

Active for 2 hours on weekly basis for every course

#### **Quizzes & assignments**

Once a week, every week



Our structure will enable students to clarify their doubts and solve the questions/assignments in a timely manner. Approximately 15 weeks of e-content is prepared inclusive of exams.

## Each course will be in 4 quadrants, fully following the UGC guidelines

1) Quadrant I - E-Tutorial which contains: Video and Audio Content in Animation, Virtual Labs, etc, along with the transcription of the video.

2) Quadrant II - E-Content which contain: Self-instructional material (digital Self Learning Material), e-Books, case studies, presentations etc. and also contains Web Resources such as further references, Related Links etc.

**3) Quadrant III** - The Discussion forum for raising of doubts and clarifying the same by the Course Coordinator.

4) Quadrant IV - Assessment, which contains: Problems and their Solutions. They can be in the form of Multiple Choice Questions, Fill in the blanks, Matching Questions, Short Answer Questions, Long Answer Questions, Quizzes, Assignments and Solutions.







Software Developer

Artificial Intelligence / Machine Learning Developer



Business Intelligence Developer



Deep Learning Engineer



Data Analyst



AWS or Azure Data Scientist



Data Architect



Quantitative Analyst



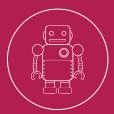
**Operations Analyst** 



Sr. Data Science

Software Engineer

Big Data Engineer



**Robotics Engineer** 



**Computer Vision Engineer** 

## **Ambassadors of Social Good**

Ample opportunities to get involved with our social organisation across India help students develop a sharp mindset to create impact first and then deliver on shareholder return. It's not surprising to find our alumni at an organisation such as the World Bank and the United Nations which is partnered with our in house think tank - Ayudh.



## Impact Entrepreneurship

Students also have the opportunity to bring fruition to their ideas with our in-house business incubator - Amrita TBI. Amrita TBI is a non-profit startup incubator supported by Govt. of India and Amrita Vishwa Vidyapeetham that funds, mentors and nurtures ideas, startups and entrepreneurs. National Award winner for being the best startup incubator in India.



(https://www.amritatbi.com)





\*Data is based on on-campus information

## The Amrita Advantage



AICTE Approved



5<sup>h</sup> Best University in India



16 Constituent Schools



Industry 4.0 aligned curriculum designed to equip yourself to succeed in the AI-Powered future



50+ industrial case studies & 10+ mini projects



World-Class Faculty



20000+ Students (Offline)



Strong Alumni Network



Master the most advanced tools, techniques, algorithms reshaping the digital landscape



Opportunity to work in research centers on industry projects



Industry Aligned Curriculum



1650+ Faculty



Affordable



Job Relevant **Industry Certifications** from CISCO, Amazon, EC Council, IBM



**Career Placement** Assistance



27 Collaborations with **Top World-Ranked Universities** 







Wide range of electives in areas of IoT, Cyber-physical Systems, Cloud computing, **Cognitive Computing** 

# **Eligibility** »

#### **Students with Indian Education:**

Direct admissions for learners with a minimum of 50% marks in UG degree. Learners below 50% marks will be also considered for admissions following a short interview.

- > Candidates must have passed 10 + 2
- Candidate must have completed any undergraduate degree with
  Mathematics at 10 + 2 level or at graduation level
- Students in their final year can apply with the last completed semester results

Candidates with work experience will have an added advantage for admissions.



## Fee Structure\*

Semester	Amount
Semester 1	Rs 45000
Semester 2	Rs 50000
Semester 3	Rs 50000
Semester 4	Rs 50000
Total**	Rs 195000

- \* Examination fee: Rs. 2000 per semester
- \* If you are a foreign national, please email ahead@amrita.edu

#### Zero Cost EMI Options available

## **Amrita AHEAD Scholarships**

Categories	Eligible for	Scholarships*	
	UG: Above 60% in 12th or equivalent		
Merit	PG: Above 6.0 CGPA or equivalent at UG level	10%	
	Enrolled AHEAD UG/PG: Above 7.5 CGPA		
Defence Personnel	All in service or retired	20%	
Martyr's	Wards of Martyred soldiers	20%	
Sports	Sports listed under IOC, IOA, AIU, MYAS	25% to 100%	
Divyang	Differently-abled	20%	
Amrita Vidyalayam	Selection process	20%	
Amrita Alumini	CGPA: above 6 / above 7.5	10% / 20%	
Amrita Talent Hunt	National/International events recognized by the Board	20%	
10			

\*Scholarships will be approved and then reviewed on a regular basis.

## Student Testimonials



"The faculties are always ahead of the technology trends. Their guidance during my studies made me so confident in choosing the right technology on my entrepreneurial journey. My alma mater also allowed me to interact with many industry veterans, CEOs, and experts through their industry connect programs."

**Gokuldas G** Founder, Voteran Political Social Network & Good Afternoon Lunch



"I owe a lot to Amrita faculties for my technological knowledge and problem-solving skills. They have a profound understanding of what they teach, and how it should be implemented in real-life scenarios. The projects we worked on at Amrita were on deep real-life issues impacting many people."

\_\_\_\_\_

Vijitha V Founder, Comet Chat Radio



"Amrita has all the resources for a student to succeed in life. The value-based education delivered here changed my perspective on education and life. The learning methodology practised here prepares students to ace their career."

\_\_\_\_\_

\_\_\_\_\_

**Arjun V** Backend developer (Python-Django), Orange & Lemons, Amsterdam



"The facilities and opportunities along with first-class education that you get from Amrita can help you achieve your career goals. The faculty's extensive research experience in the areas they teach helps students to understand the practical aspects. The teaching-learning process makes students job-ready before the course completion."

**P S Narayanan** Phone Parloan



#### SCHOOL OF COMPUTING



Apply now: https://admission.onlineamrita.com/