Get an Online certified Degree in BCA
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 inter play 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.
There are two types of Education

Education for Living.
Education for Life.

"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."

Our Chancellor

Sri Mata Amritanandamayi Devi
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

“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.”

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 UGC 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.
Our online Bachelor of Computer Applications (B. C. A.), Undergraduate program is for aspirants looking to start a career in Computer Science. The program is rigorous, cutting edge and continuously evolving to keep abreast with industry standards. The program also has an analytical core encompassing computer systems, information systems and computer applications.
How to earn a degree on Amrita Ahead

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.
<table>
<thead>
<tr>
<th>Limits</th>
<th>No. of years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>3</td>
</tr>
<tr>
<td>Maximum</td>
<td>6</td>
</tr>
</tbody>
</table>
# Curriculum

## Semester 1

**BCA**

- Communicative English -1
- Foundations of Applied Mathematics- Part I
- Principles of Management
- Computer Essentials
- Problem Solving and Algorithmic Thinking
- Problem Solving and Algorithmic Thinking Lab

## Semester 2

**BCA**

- Communicative English -II
- Foundations of Applied Mathematics- Part II
- Database Management System
- Object Oriented Programming using Java
- Operating System and Computer Architecture
- Database Management System Lab
- Object Oriented Programming using Java Lab
Semester 3
BCA

- Discrete Mathematics
- Data Structures and Algorithms
- Computer Networks
- Elective A
- Elective B
- Data Structures and Algorithms Lab
- Computer Networks Lab

Semester 4
BCA

- Distributed Systems
- Web Application Development
- Software Engineering
- Elective C
- Elective D
- Web Application Development -Lab
Semester 5
BCA

- C# and .NET Framework
- Advanced Java and J2EE
- Mobile Application Development
- Elective E
- Elective F
- Advanced Java and J2EE Lab

Semester 6
BCA

- Industry project
The BCA program has a series of specialisations which are -

- Data Science & Analytics
- Systems & Networks (CISCO Certified Network Associate)
- Cyber Security & Applications
- Mobile Application & Full Stack Dev. Skills
- Virtual & Augmented Reality
- Cloud Computing with AWS

They can be achieved with the electives listed below -

**Industry Relevant Electives**
(Training to earn Amazon, Cisco, CompTia & IBM certifications)

**AWS and Cloud computing**
(Training to earn Amazon certification and badges)

- Amazon- AWS Academy Cloud Development
- Amazon - AWS Academy Cloud Architecting
- Amazon - AWS Academy Data Analytics Lab

**CISCO and networking**
(Training to earn CCNA Certifications)

- CCNA: Introduction to Networks
- CCNA: Switching, Routing & Wireless Essentials
- CCNA: Enterprise Networking, Security & Automation

**Security Courses**
(Training to earn CompTia Certifications)

- EC Council Certified Secure Computer User (CSCU)
- EC Council Certified Application Security Engineer (CASE)
- EC Council Certified Ethical Hacker
Microsoft Azure Certification

> Azure Fundamentals
> Azure Data Engineer
> Azure AI Engineer

Virtual and Augmented Reality

(Google)

> Introduction to VR Programming
> Game programming
> 3D interaction design and 3D models for virtual reality
> Cross platform game development
> Designing human computer interfaces
> Augmented Reality for Marketing and Business Integrations

Other Industry-relevant Electives

> Introduction to Artificial Intelligence
> Applications of Machine Learning
> Data Mining
> Linear Algebra for Machine Learning
> AI for Drug Discovery & Target Validation
> Applied Predictive Analytics
> Big Data Analytics & Visualization
> Natural Language Processing
> Statistics & Probability for Machine Learning
> Business Analytics
> Bio medical & Health Informatics
Artificial intelligence and data science

- Introduction to Artificial Intelligence
- Applications of Machine Learning
- Data Mining
- Linear Algebra for Machine Learning
- AI for Drug Discovery & Target Validation
- Applied Predictive Analytics
- Big Data Analytics & Visualization
- Natural Language Processing
- Statistics & Probability for Machine Learning
- Business Analytics
- Bio medical & Health Informatics
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 in the final semester alongside industry veterans in areas of Machine Learning, NLP, Vision, Deep learning, Cybersecurity, Cloud Computing & Distributed Computing, BlockChain, IoT.

Online Practical Virtual Labs from Amazon AWS, CISCO Academy and Amrita.

Industry Certification Training
(Certification costs are optional and extra)
CISCO Certified Network Associate
Optional elective EC-Council Certified Security Specialist (ECSS)
Optional PenTest+ (Plus) Certification
CompTIA IT Certifications
IBM Practitioner
Online Class Schedule

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.
Job Roles

- Data Scientist
- Health Care Analyst
- Software Engineer
- Web Developer
- Business Analyst
- Data Analyst
- Market Research Analyst
- Project Manager
- Big Data Analyst
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 Worldbank, 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.
Placements*

International University Partners
Go Global with our International Programs: Student Exchange program, Study Abroad Program and 3+1+ x Integrated Masters Program

*Data is based on on-campus information
The Amrita Advantage

- UGC Entitled Programs
- World-Class Faculty
- Industry Aligned Curriculum
- Career Placement Assistance
- 5th Best University in India
- 20000+ Students (Offline)
- 1650+ Faculty
- 27 Collaborations with Top World-Ranked Universities
- 16 Constituent Schools
- Strong Alumni Network
- Affordable
- Master the advanced tools, techniques, algorithms reshaping the digital landscape
- Job Relevant Industry Certifications from CISCO, Amazon, EC Council, IBM
- Wide range of electives in areas of IOT, Cyber physical Systems, Cloud computing, Cognitive Computing
- 50+ industrial case studies & 10+ Mini projects
- Opportunity to work in research centers on industry projects
Eligibility

**Students with Indian Education:**
Direct admissions for learners with an aggregate minimum of 55% marks. Learners below 55% marks will be also considered for admissions following a short interview.

- Candidates must have passed 10 + 2
- Candidates who have passed 3-year diploma can also apply

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

**Students with a Foreign Education:**
Certificate of Equivalence from the Association of Indian Universities is needed. This is required for any student with a Foreign Education who wishes to apply to an Indian University. Please refer to Foreign Education who wish to apply to any Indian University [here](https://aiu.ac.in)
## Fee Structure

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<th>Semester</th>
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<tr>
<td>Semester 1</td>
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<tr>
<td>Semester 2</td>
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<tr>
<td>Semester 3</td>
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<td><strong>Total</strong></td>
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* If you are a foreign national, please email ahead@amrita.edu

** Avail reduction in total fees, if paid in full

**Zero Cost EMI Options available**
### Amrita AHEAD Scholarships

<table>
<thead>
<tr>
<th>Categories</th>
<th>Eligible for</th>
<th>Scholarships*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merit</td>
<td>UG: Above 60% in 12th or equivalent</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>PG: Above 6.0 CGPA or equivalent at UG level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrolled AHEAD UG/PG: Above 7.5 CGPA</td>
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<tr>
<td>Defence Personnel</td>
<td>All in service or retired</td>
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</tr>
<tr>
<td>Martyr’s</td>
<td>Wards of Martyred soldiers</td>
<td>20%</td>
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<tr>
<td>Sports</td>
<td>Sports listed under IOC, IOA, AIU, MYAS</td>
<td>25% to 100%</td>
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<tr>
<td>Divyang</td>
<td>Differently-abled</td>
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<tr>
<td>Amrita Vidyalayam</td>
<td>Selection process</td>
<td>20%</td>
</tr>
<tr>
<td>Amrita Alumini</td>
<td>CGPA: above 6 / above 7.5</td>
<td>10% / 20%</td>
</tr>
<tr>
<td>Amrita Talent Hunt</td>
<td>National/International events recognized by the Board</td>
<td>20%</td>
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</tbody>
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*Scholarships will be approved and then reviewed on a regular basis.
“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

“At Amrita, I was able to understand my strengths and weaknesses and improve myself in every aspect with the right mentorship and guidance from my teachers and the department as a whole. In just a span of 2 years, I have a number of titles and skills to add to my name, a tremendous change that can happen to a fresher. My heartfelt gratitude goes to all amrita faculty and staff for the best care and support.”

Harsha Deepa  
Google Hall of Fame

“Amrita provides the students with the best curriculum including new subjects leading in technology. There are brilliant opportunities that help students to gain professional experience in their field of interest. They also provide the students with placements in Top Companies of India.”

Sonam Shinde  
Operation Executive in Infosys
Placements*

*Data is based on on-campus information

International University Partners

Go Global with our International Programs: Student Exchange program, Study Abroad Program and 3+1+ x Integrated Masters Program

*Data is based on on-campus information
“The rigorous training offered here in cutting-edge technologies by eminent faculty helped me to equip myself for industry 4.0 revolution. There are various clubs within the campus like bi0s, foss, code@amrita which helps you excel in fields like cybersecurity, competitive programming, Artificial Intelligence & Data Science etc.”

**Abhishekh Sidharth**  
Google Hall of Fame, Identifying Security Vulnerability

“The BCA program here not only helped in laying my foundational skills but introduced me to the current trends and updates in the industry, varying from widely used data science applications to aggressively researched artificial intelligence. Being a very dynamic sector, staying up to date is of prime importance, at Amrita, the students are industry ready for any given day.”

**Sultan Nizarudin**  
Founder, Craft Coder

“BCA at Amrita changed my life. The courses were well-structured and focused primarily on real-world applications of various computer technologies and languages. Almost every major subject had practical, hands-on labs. I met some of the most amazing professors in my life at Amrita.”

**Abhishek J M**  
Security Engineer at CRED

*(Data is based on on-campus information)*