

Bachelor of Computer Applications











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Mr. Ajit Chauhan

Chairman - 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. Our career-oriented programmes are specially designed for working professionals offering futuristic learning experiences on our awarded LMS, along with face to face interactions, live online classes, webinars, video lectures & one-to-one sessions with faculty, designed and delivered by over 6000 eminent corporate experts and faculties. With a constant and sustainable rise in the need for highly-skilled professionals, it is becoming crucial for employers to develop and retain well-educated and motivated employees. At Amity University Online, we understand and create professionally strong individuals with higher education and training for meeting the evolving industry demands.

Message from Directors



Dr. Priya Mary Mathew

Director, Academics

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 And anyone who says "I do not know" at this age, will risk being labelled "outdated".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.



Prof. Abhinash Kumar

Director

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 programmes adhere to UGC's stringent criteria and we are at par with the campus programmes.

About Amity University Online

Bringing together pedagogy, content and technology, Amity University Online is home to a range of University Grants Commission (UGC) recognized programmes meant for anytime, anywhere learning. Amity University Online serves the educational aspirations of students across the globe through 24 programmes under Masters, Bachelors, Post Graduate Diplomas through its well-researched curriculum, renowned faculty, cutting-edge technology and close industry academic partnerships.



The country's first university to receive the prestigious UGC accreditations for its online programmes, Amity University Online is devoted to creating a transformative learning environment. In today's environment, when content is mobile and available anytime, anywhere, learning is truly a click away.



A LEADING GLOBAL EDUCATION GROUP

Amity Education Group is one of the largest education groups, established over twenty years ago, offering globally benchmarked education right From pre-school to Ph.D. level with over 400 UG & PG programmes across various disciplines in education.

175,000

Students

225,000

Online Students

6,000+

Faculty

120,000

Alumni Worldwide

1,200

Acres of Campuses

28

Schools & Pre-schools

11

Universities in Noida, Gurugram, Greater Noida, Jaipur, Mohali Lucknow, Mumbai, Gwalior, Raipur, Kolkata, Ranchi & Patna

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International Campuses including London, Dubai, Singapore, New York, San Francisco, Abu Dhabi, Mauritius, Sharjah, South Africa, Amsterdam, Nairobi, Tashkent I take this opportunity to thank all the academic and non-academic staff in providing sufficient support in the completion of my course. Apart from online study content, they have interactive video lecture programmes.

Harisha

Bharti Airtel

About the Programme

BACHELOR OF COMPUTER APPLICATIONS

Learning Efforts - 12/15 hrs a week | Duration - 3 Years | Credits - 134

Bachelor of Computer Applications is a 3-year (6 semesters) programme for undergraduates seeking career in the IT industry. The degree is awarded for completing the programme in the study fields of software testing, web design, software development and programming, computer networking and computer systems. It provides a substantial understanding of concepts in the key areas of Computer Science.

The programme includes all important concepts, practices, in areas of data structures, C++ and DBMS, computer networks, database management systems, operating systems, computer graphics and visual basic, data warehousing and mining, Java programming, multimedia, and web technologies. The subjects provide good knowledge in critical areas of computer science and networking. Information Technology sector has a substantial economic impact and hence provide ample job opportunities.

Programme Curriculum

SEMESTER 1

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

SEMESTER 3

- · Computational Statistics
- Network Basics
- Introduction to Data Base Management Systems
- · Object Oriented Programming Using Java
- · Green computing

SEMESTER 5

- · Introduction to Artificial Intelligence
- · Internet of Things(UG) Syllabus
- · Introduction to Enterprise Resource Planning
- · Data Warehousing and Mining
- · Fundamentals of Ecommerce
- Professional Ethics

SEMESTER 2

- · Data Structures Using C
- Environmental Studies
- Software Engineering and Modeling(UG)
 Syllabus
- · Operating System Concepts
- Individual Excellence and Social Dynamic

SEMESTER 4

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

SEMESTER 6

- Introduction to e-Governance
- · Block chain Technologies
- Introduction to Data Science
- · Human Resource Management
- Major Project [Non-Teaching Credit Courses]

Our Global Faculty



Asst. Prof. Brian Porter

MSc. Management - Boston University,
Online Facilitator - Boston University,
Adjunct Professor - Nicholas College,
Vice President of Strategic Partnerships at MGCG



Prof. Luke Pearce

M.A. in Education, University of Sheffield, PGCE from Sheffield Hallam University, Teaching fellow - University College London



Prof. (Dr.) Ronald C Darnell

PhD, Organization Management - IT Management, Capella University, USA, Professor and Program Coordinator -Amberton University, Visiting Professor - DeVry, University, Professor - Parker University, Principal Consultant & Agile Coach- Vizient, Inc.



Prof. (Dr.) Julia Fallon

MBA from Cardiff University and PhD from the University of Wales, UK, Principal Lecturer, at Cardiff Metropolitan University



Prof. Mike Berry

MSc. in Math and Economics -Imperial College London, Professor (Marketing) at Hult International Business School, UK

Eligibility

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

Accredited. Respected. Trusted.



Programmes Recognised by Distance Education Bureau (DEB) UGC



Amity's Online MBA has been ranked by **QS as #37 Worldwide** In 2021 ranking.



Asia's only not-for-profit university to get US regional accreditation





Amity's Online MBA & BBA are the 1st and only EOCCS certified programmes in India





Accredited Member of Accreditation Council for Business School and Programme (ACBSP), USA





It was good to enroll in a programme from Amity. This has helped me in excelling career growth in my current organization through theoretical knowledge. I was able to deliver much more based on the course which I opted for. Helped me in learning new terminologies and approaches.

Aman Gaur

PayTM

Amity University Online Advantage



Live & Interactive Lectures by Expert Faculties



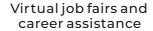


World-class curriculum designed by eminent faculty and industry professionals

Learn from the leading global faculties



Regular webinars by industry leaders





International collaborations with Ivy League universities

Easy-to-use LMS accessible anytime, anywhere





Strong alumni network

Exemplary employer rating of various programmes

Industry Mentors



Sriram Ram narayan
Director- Market South Asia
Thomson Reuters



Sudhir Aggarwal
Chief Strategy Officer
Silver Touch technologies Ltd.



Saraswati Ramachandra
Director- IT
CITI

Alumni Working At

































FOR ENQUIRIES

Amity University Campus, Sector - 125, Noida, India Toll Free No. : 1800-102-3434

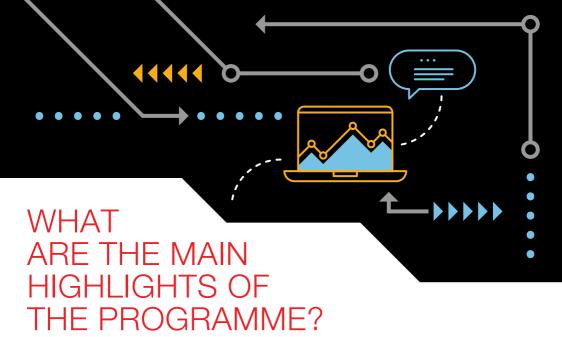
Website: www.amityonline.com











- Learn without a career break with online classes conducted mostly on weekends or after business hours.
- The programme offers a set of courses that allow learners to gain expertise in designing and managing hardware, software, storage & networking systems, and Infrastructure Services management.
- ► The programme makes use of Simulation Software, and Deployment Environments. These include CloudSim, NS2, Net-SNMP, CPU-OS Simulator, Amazon's Compute and Storage platforms, Apache cloud suite, and other open-source tools/frameworks.
- The Dissertation (Project Work) in the final semester enables students to apply concepts and techniques learnt during the programme.

- ► The programme uses a Continuous Evaluation System that assesses the learners over convenient and regular intervals. Such a system provides timely and frequent feedback and helps busy working professionals stay on course with the programme.
- The education delivery methodology is a blend of classroom and experiential learning. Experiential learning consists of lab exercises, assignments, case studies and work-integrated activities.
- Participants who successfully complete the programme will become members of an elite & global community of BITS Pilani Alumni.





WHAT ARE THE **PROGRAMME OBJECTIVES?**

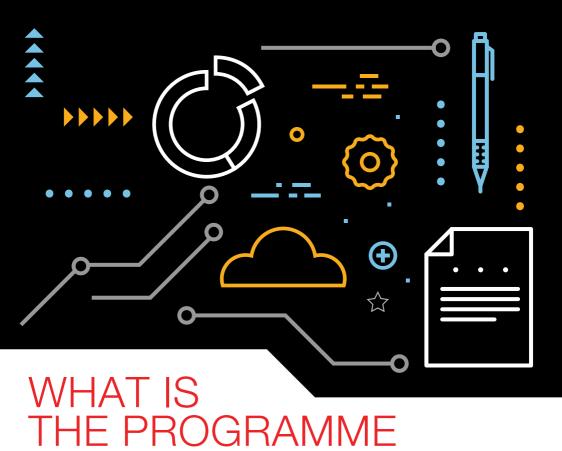
The programme is designed to prepare the next generation of IT professionals who will be able to apply design thinking to build computing-driven solutions for diverse customer needs in a variety of scenarios / environments



WHAT ARE THE LEARNING **OUTCOMES?**

Upon successful completion of the programme, participants will be able to:

- Demonstrate understanding of hardware and software.
- Demonstrate problem solving skills using programming and software.
- Apply discrete math and statistics to solve computational problems.
- Demonstrate an acquaintance with different trajectories of thoughts in the humanities.
- Demonstrate understanding of design principles and design thinking.
- Apply design thinking in the context of software



The curriculum offers an innovative confluence of knowledge and skills highly valued by the industry and includes popular subjects in Technology and Science, and areas such as Design thinking, Logic, Philosophy, Creativity, and Cross-cultural skills.

The curriculum includes 24 core courses and 4 electives. The 24 core courses comprise of 10 courses in Computers and

Computing, 4 courses in Mathematics, 5 courses in Design, and 5 courses in Humanities.

The 4 electives^[1] will be chosen from a pool of 28 elective courses shared with the employer organisation. This pool of electives comprises of 9 courses in Computers and Computing, 2 courses in Mathematics, 6 courses in Design, and 11 courses in Humanities.



CURRICULUM?

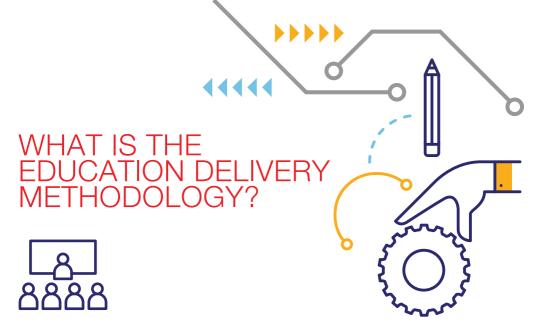
[1] Choice of 4 electives will be mutually made by BITS Pilani and the employer organization depending on factors such as student preferences, business needs, and feasibility.

Electives finally offered will be at the discretion of the BITS Pilani, and will be decided in consultation with HCL. Offered electives will be made available to enrolled students at the beginning of each semester.

PROGRAMME STRUCTURE

Year	First Semester	Units	Second Semester	Units
I	Writing Practice	3	Dynamics of Social Change	3
	Symbolic Logic	3	Computer Programming	4
	Electrical Sciences	3	Discrete Structures for Computer Science	3
	Probability & Statistics	3	Environmental Studies	3
	Total	12	Total	13
	Digital Design	4	Computer Org and Architecture	4
II	Data Structures	4	Object Oriented Programming and Design	4
	Linear Algebra & Optimization	3	Cultural Studies	3
	Creative Thinking	3	Evolution of Design	3
	Total	14	Total	14
	Summer Term	: Design	Project - 5 Units	
III	Algorithm Design	3	Software Design Principles	4
	Critical Analysis of Literature and Cinema	3	Computing and Design	3
	Humanities and Design	3	Statistical Inferences and Applications	3
	Elective	3/4	Elective	3/4
	Total	12/13	Total	13/14
IV	Information Security	3	Capstone Project	
	Human Computer Interaction	3		15
	Elective	3/4		15
	Elective	3/4		
	Total	12/14	Total	15

Electives finally offered will be at the discretion of the BITS Pilani, and will be decided in consultation with HCL. Offered electives will be made available to enrolled students at the beginning of each semester.



CLASSROOM SESSIONS

- Classes will be conducted by BITS Pilani faculty over weekends. A typical weekend classroom session per subject is of 1.5-2 hours duration. Since students typically pursue 4 courses in a semester, they will be expected to attend approximately 4 classroom sessions over a weekend. These classroom sessions will be typically scheduled over 16 weekends per semester
- Classroom sessions for each course will be conducted through live online sessions which can be accessed by the learners from any location using a computer and a high-speed internet connection. Even for courses that will be taught through live online sessions, learners will get an opportunity to interact with expert faculty using interactive, technology-enabled virtual classrooms. These online classrooms offer similar levels of interactivity as regular classrooms.

The schedule of the classroom sessions will be announced at the beginning of each semester.

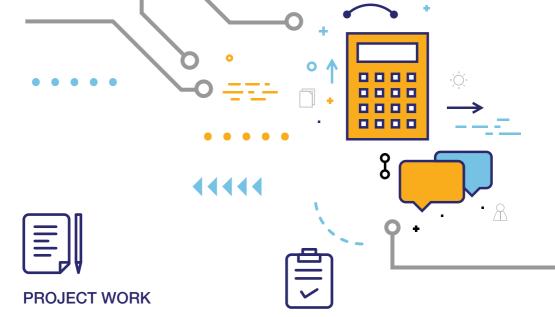


EXPERIENTIAL LEARNING & LABS

The programme emphasises on Experiential Learning that allows learners to apply concepts learnt in classroom in simulated and real work situations. This is achieved through Simulations, Online Labs, Case Studies, Group Discussions, and Assignments, etc.

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During the final semester participants carryout a semester-long intensive project work applying the various concepts learnt throughout the program guided by the organisation mentor and supervisor. Participants are provided access to virtual labs where applicable, and faculty expertise to support the project work.



DIGITAL LEARNING

Learners can access engaging learning material at their own pace which lecture videos, student notes, curated content etc. for select courses, through a learning management platform that is engaging and mobile-friendly.

EXAMINATIONS & CONTINUOUS ASSESSMENT

The learners' performance is assessed continuously throughout the semester using various tools such as quiz, assignments, mid-semester and comprehensive exams. The assessment results are shared with the learners to improve their performance.

Each course will entail a minimum of 1 Assignment / Quiz, a mid-semester exam and a final comprehensive exam. Your semester calendar will clearly indicate the dates of the mid-semester and comprehensive exams. Typically, a mid-semester or comprehensive examination for a course is of 2-3 hours duration. The examinations are typically conducted over a weekend, i.e. Saturday and Sunday. These exams will be conducted either at the learners' office premises, or at another suitable location. Details regarding the exam location will be communicated at the beginning of the semester.

WHAT ARE THE ELIGIBILITY CRITERIA?

Trainees / Employed professionals who have completed their 10+2 (in Science stream Including Mathematics and Physics as subjects) or equivalent educational qualification with minimum 60% aggregate marks (including minimum 60% marks each in Mathematics and Physics) and minimum one year of relevant work experience within HCL are eligible to apply.

Note the following exceptions:

In case an applicant studied Business
 Mathematics, it will not be considered

- equivalent to having studied Mathematics at 10+2. The type of Mathematics studied by the applicant will be evaluated by the BITS Pilani Admission Cell to ascertain if an applicant meets the eligibility requirements.
- The above are only the minimum criteria to apply. The final decision to offer admission to an applicant rests with BITS Pilani which will be made based on an overall review of your application information.

FEE STRUCTURE

The following fees schedule is applicable for candidates seeking new admission during the academic year 2022-23.

Application Fees (one time)	:INR 500
Admission Fees (one time)	:INR 5,500
Semester Fees (per semester)	:INR 29,500

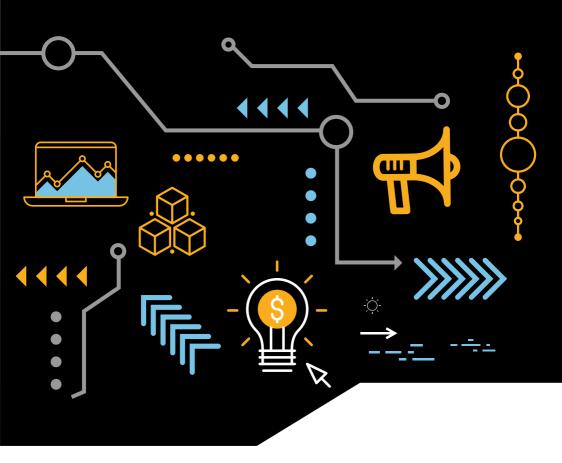


- Click here to visit the Online Application Center. Create your login at the Online Application Center by entering your official HCL Email ID only and create a password of your choice. Once your login has been created, you can anytime access the Online Application Center using your official email ID and password.
- Begin by clicking on Step 1 'Fill/ Edit and Submit Application Form'. This will enable you to select the programme of your choice. After you have chosen your programme, you will be asked to fill your details in an online form. You must fill all details and press 'Submit' button given at the bottom of the form.
- Now, click on 'Pay Application Fee' to pay INR 500/- using Netbanking/ Debit Card/ Credit Card.
- Finally, click on 'Upload & Submit All Required Documents'. This will allow you to upload one-by-one all the mandatory supporting documents such academic certificates and transcripts, photograph, etc. and complete the application process. Acceptable file formats for uploading these documents are .DOC, .DOCX, .PDF, .ZIP and .JPEG.

- Upon receipt of your Application Form and all other enclosures, the Admissions Cell will scrutinise them for completeness, accuracy and eligibility.
- Admission Cell will intimate selected candidates by email within two weeks of submission of application with all supporting documents. The selection status can also be checked by logging in to the Online Application Centre.

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DISCLAIMER

Ever since it was declared as a Deemed to be University in 1964, BITS Pilani has been offering higher education programmes in science and technology, and has earned an enviable reputation for its innovations in this sphere. The Work Integrated Learning Programmes (WILP) of BITS Pilani constitutes a unique set of educational offerings for working professionals. These programmes, which BITS began to offer in 1979, have, over the years, evolved along the lines envisaged in the National Policy on Education, 1986.

The WILP are rigorous higher education programmes in technology areas, designed keeping the evolving needs of industry in view, and meant for working professionals in their respective domains. The very intent is to deliver the education at the workplace, in order that the greatest degree

of work integration of the education is achieved, and thus the WILP are very distinct in philosophy and pedagogy from open, distance learning programmes. Though it is incorrect and improper, at times the WILP are compared to ODL programmes. Accordingly, it has been our constant endeavor to engage with the regulator, and provide all necessary information about these programmes.

The WILP have been well received, and accepted by industry, because of the high quality of the programmes in terms of the curriculum and the instruction, and also because of the high degree of work integration, which results not only in up gradation of knowledge, but also in up skilling, and productivity increase.

HCL_30/08/2022