



# M.O.P. Vaishnav College for Women (Autonomous)

(College affiliated to University of Madras & Re-accredited at 'A++' Grade by NAAC)  
Chennai - 600 034



## DEPARTMENT OF INFORMATION TECHNOLOGY BACHELOR OF COMPUTER APPLICATIONS (B.C.A)



## **ABOUT B.C.A. PROGRAMME**

The Department of Information Technology offers undergraduate degree programme in Bachelor's of Computer Applications (B.C.A). B.C.A focuses on empowering students onward with its discernment on competency in theoretical, programming, communication, teamwork, organization and management skills. B.C.A at M.O.P is an exhilarant professional discipline with diverse and well-balanced technical and soft skills, offering numerous career opportunities. Apart from imparting various skill courses, students are also motivated to do research work in their domain interest.

## **UNIQUE SELLING PROPOSITION**

- Preparing students for their future careers is a key strategic goal of the course.
- The programme provides employability skills to women students through exposure in emerging technologies and also helps them to develop sustainable software applications at global level.
- The students are embarked towards research and real time projects, as they form the spotlights of the programme.

## **ELIGIBILITY FOR B.C.A.**

Standard XII students from any stream with Mathematics can apply for the programme.

## **PROGRAMME SPECIFIC OUTCOMES (PSO) / COURSE OUTCOMES (CO)**

Link for B.C.A. PSO and CO: <https://mopvc.edu.in/pos-psos-cos/>

## **BCA PROGRAMME CURRICULUM**

The programme has eminent and experienced faculty with sturdy technical and research experience. Students are exposed to multifarious areas of computer applications and the programme has been meeting the changing needs of IT industry by periodically updating the syllabus with the inclusion of latest technology.

## CORE COURSES

Programming in C	Data Structures Using Python	Basics of Digital Logic and Computer Architecture
Operating Systems with Unix	Software Engineering With DevOps	Optimization Techniques Using Open Source Tool
Database System Concepts	Programming in JAVA	High Performance Computing
Data Mining	Data Communication & Networks	Cyber Security
Machine Learning	Advanced JAVA Programming	Web Programming

## ALLIED COURSES

Mathematics for Computer Applications	Fundamentals of Accounting	Fundamentals of Cost & Management Accounting
Statistics For Computer Applications	Accounting Software (Tally) - I	Accounting Software (Tally)-II

## TECHNICAL SKILL COURSES

PHP & MySQL	Software Testing
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## SPECIALIZATION COURSES

XML and its Applications	Business Intelligence	Artificial Intelligence
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## TEACHING AND LEARNING METHODOLOGIES

In order to provide an effective learning experience, the faculty adopts various teaching methodologies like Tech Navigator, Language Parser, Concept Simulator, Convergence Learning apart from activities like seminars, workshops, role-plays, quiz, content development and brainstorming sessions.

**WORKSHOPS:** on current topics like Internet of Things, Scilab for Analytics and Optimization, WireShark, Robotic Process Automation, Deep Learning Models using Python, Digital marketing and website portability are organized.

**SEMINARS:** on latest topics like Metaverse, Blockchain Technology, 5G Technologies, Introduction to 2D Graphics, UI/UX Design, are conducted.

**WEBINARS:** Keeping the process of learning continuous and active, a series of webinars, FDP, National Symposium are conducted by the programme which include: Artificial Intelligence, Salesforce, Product Engineering, Machine Learning, Intellectual Property Rights and Digital Transformation, Low-Code / No Code and Women Safety in Cyber world.

**RESEARCH INITIATIVES:** Students of B.C.A. under the guidance of staff members have published research papers on latest trending topics in various National and International conferences and have publications in UGC Listed and Scopus indexed journals.

**ICCCMIT:** An International Conference on Communication, Computing and Information Technology (**ICCCMIT**) is organized by the Department of Information technology, providing a platform for academia, research scholars and professionals from industry as well as students to discuss, share and disseminate innovative views on recent trends and development in communication, computing and information technology. So far, 5 international conferences have been held in the year 2012, 2014, 2017, 2019 and 2021.

### **STUDENT SUPPORT AND PROGRESSION**

The students from the B.C.A programme join their hands to organize the following event as a part of the programme club '**THE HASH CLUB**'.

**PRAGYAAN-** An Intramural event that coordinates the students of the B.C.A programme to take part in the various competitions that is fully related to the field of Computer Science.

**JOURNAL** - The programme inculcates the art of article writing skills amongst students by means of publishing the thematic journal “The Compiler”. Some of the key topics of this journal include Robotic Process Automation, Wearable Technology, Cyber Security, Deep Learning.

**OLAP** - An intercollegiate event that brings together students from different colleges belonging to Computer Science stream in and around the city to explore and exhibit their talents in their interested domain of IT.

**INTERNATIONAL PROGRAMMER’S DAY**- Celebrated on the 256th day of every year, the day honors programmers and innovators for innovating and designing programs for an easy living. The department also commemorates it by conducting events like Web-A-Thon and IoT Idea-thon.

**INTERNATIONAL CYBER SECURITY DAY**- It is celebrated on 30<sup>th</sup> November every year. The Department commemorated the same on 23 December 2022 as an initiative to enhance the awareness of the cyber space and also impart knowledge on cyber security especially for the student community.

### **EXTENSION ACTIVITIES**

**VIGYAN** - Vaishnav initiative for Gyaan dhaan- providing computer skills to junior students of Ananya-the learning center of Madras Dyslexia Association. The students were trained on basic working with MS-word and MS-paint.

**VILLAGE VISIT** - ‘Thozhil Seyyallam Thozhi’. The B.C.A programme adopted a village A.Reddipalayam near Minjur , Tiruvallur District. A Government High School was chosen and their students were academically benefitted. The BCA students imparted Basic Office Skills in word and excel. Also donated a Public Address System to the school.

**VIKAS**- As part of MOP cares, the students of BCA programme imparted Basic Computer Skills, Communication skills, Presentation skills and Career Guidance to the higher secondary students of Mary Clubwala Jadhav Girls Hr Sec School, Chennai.

**COMPUTER FAIR** - Students display real time projects for school and other college students.

## ONLINE COURSES:

The students of B.C.A take certified online courses on key subjects like Artificial Intelligence, Cyber Security, Machine Learning, Web Development and Big Data offered by International Universities.

## INTERNSHIPS AND PLACEMENTS:

Students are also led in the right direction to pursue an internship in various top companies like Goldman Sachs, TCS and more. The unique curriculum, communication and presentation skills have made the students to reach their speculated positions in top IT companies. The college has a very effective placement cell that not only orients the student regarding career opportunities but also secures them good placements in reputed companies by coordinating between the employer and the students.

## PROMINENT RECRUITERS:

<ul style="list-style-type: none"><li>• <b>Cognizant</b></li><li>• <b>Infosys</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Intellect Design</b></li><li>• <b>TCS</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Indium Software</b></li><li>• <b>Deloitte</b></li></ul>
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## STUDENT ACHIEVEMENTS:

**CM AWARD** -For the year 2015-16, at the Chennai District level, the Chief Minister's Award for Excellence in e-Governance for Students was won by the BCA students for developing an Android application. The students were rewarded Rs.10,000 by Collector E. Sundaravalli IAS. The project had been nominated for the State Level award.

**CHENNAI TRADE FAIR** - Students displayed their projects in the December 2019 and January 2023 Chennai Trade Fair organized by the Tamil Nadu Government in Island Grounds.

## TERTIARY LEVEL EDUCATION

- M.S from Foreign Universities
- M.S (Software Engineering)
- M.Sc. (Data Science)
- M.Sc. (IT)
- M.Sc. (Computer Science)
- Masters of Computer Applications
- M.B.A

## CAREERS IN IT / IT-RELATED INDUSTRY

- Software Engineer/Programmer / Tester
- Data Scientist / Data Analyst
- Web Designer/Mobile App Developer
- Database Administrator
- Financial Analyst/Operational Executives in Banks





## ALUMNI OF B.C.A

Students from B.C.A have pursued their higher studies in various National and International universities.

They are also placed in reputed IT and IT related companies.



Muskaan Shah , batch of 2018-2021, received the Student of the year Award and is in the College Wall of Fame. She got her internship at Goldman Sachs Bangalore. She is currently a FrontEnd Web Developer, RocketLane.



Dharshini Vasudevan, batch of 2018-2021, is pursuing her post graduation certificate in Masters in Science in Information Systems from the University of Texas, Arlington.



“The BCA curriculum in MOP is unique and upto date with the current requirement of the IT industry. This helped me publish research papers in national and international conferences during the three years. The staff provided constant support and ample opportunities to explore my skills in various technologies like Data Science, Cyber Security, Internet of things. The projects, guest lectures, workshops, and internship in these technologies helped me achieve my dream job.”

Prriyadarshini MA

Batch: 2016-19 -Sr Software QA Engineer, Gigamon , Chennai

“Doing BCA in MOP gives us a lot of exposure to groom ourselves to face the rapid growth in IT industry. A course that gives you dual opportunities to explore the Banking Industry as well as IT sector. With the amount of additional crash course programs that MOPVCFW offers will help us uplift our skill sets.”

Sruthi R

Batch: 2011-2014 - Senior Analyst II

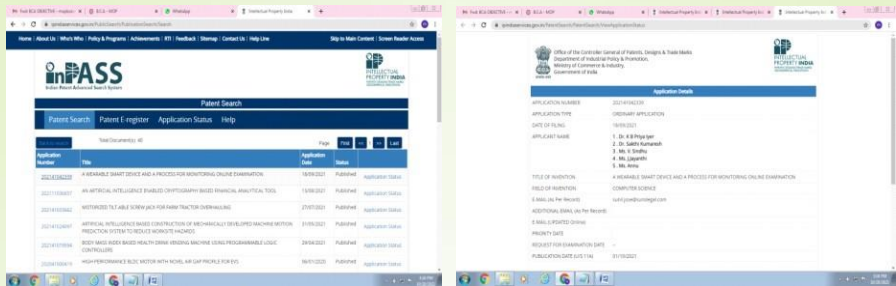
RBS India Private Services Limited, Chennai





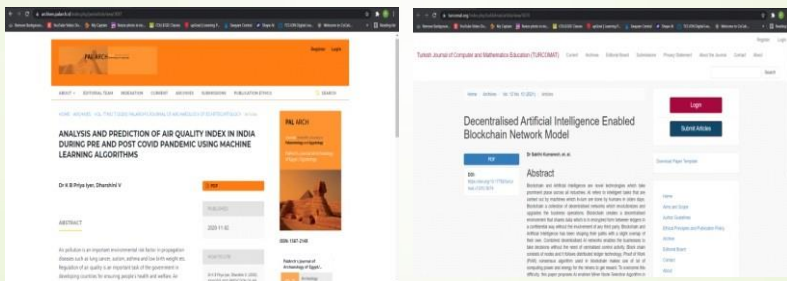
## MILESTONES

The B.C.A faculty have published a patent titled “A Wearable Smart Device and A Process For Monitoring Online Examination.”



## RESEARCH PAPER PUBLICATIONS

The students and faculty of B.C.A have published their research papers in UGC listed and Scopus indexed journals.



## PROJECTS

Students displayed their projects in the Chennai Trade Fair organized by the Government of Tamil Nadu.

The Chief Minister's Award for Excellence in e-Governance for Students was won by the BCA students of M.O.P. Vaishnav College for Women for developing an Android application.

