



**B. K. BIRLA COLLEGE, KALYAN**  
(Empowered Autonomous Status)  
Affiliated to University of Mumbai  
Reaccredited by NAAC (4th Cycle) with 'A++' Grade  
<https://bkbck.edu.in>



# International Conference on Computing, STEM and Applied Sciences (ICCSAS-2025)

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**Organized by** : B. K. Birla College, Kalyan, Maharashtra, India



20<sup>th</sup> - 22<sup>nd</sup> MAR 2025



B. K. Birla College, Kalyan, Maharashtra, India



[www.bkbirlaconference.in](http://www.bkbirlaconference.in)



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## About Us

*Scaling newer heights towards achieving academic excellence and redefining the educational landscape*

B. K. Birla College of Arts, Science and Commerce, Kalyan a multi-faculty premier institution of higher learning, with an enrolment of 9,000+ students in UG, PG and Research Programmes (Additionally, 4,400+ in Junior College) is affiliated to the University of Mumbai (UoM). The College was established in 1972, by Kalyan Citizens' Education Society with the blessings of Pujya Shri B. K. Birla ji and Pujya Smt. Sarala ji Birla.

The College is spread over 20 acres of land (including B. K. Birla Public School) in the prime location of Kalyan city. The college has 72 classrooms with ICT facility, with 50% being smart classrooms. The College has a well-equipped Central Library (Green Library) with IT infrastructure. The institution has strengthened its infrastructure by adding 55,000 sq. ft. to the existing 1,32,421 sq. ft. to accommodate cutting-edge programs / Courses.

The campus has 49.53% lush green cover with over 400 trees, Biodiversity Park, Sewage Treatment Plant (STP), an Effluent Treatment Plant (ETP), Solar Power Plants (160 KW + 40 KW) generating about 50% power needs of the College and four scientifically designed rainwater harvesting units, LED Lighting and BLDC Fans. Environmental Sciences Laboratory has been granted accreditation by NABL in August 2022 for wastewater analysis. Additionally, the scope of Accreditation is being increased for the analysis of Soil, Ground Water and Drinking Water. The College has received an Envirocare Green Award 2023.

The College offers 37 UG, 35 PG courses and 09 Ph.D. programs. The College also conducts PG Diploma in Bio-nanotechnology, PG Diploma in Global Education and A-DMLT Courses. The College has recently introduced new age study programmes like B.VOC in 4 subjects M.Sc. (Data Science and Big Data Analytics), M.Sc. (Finance), M.Sc. (Artificial Intelligence), M.Sc. (Food Science and Nutraceuticals), B.M.S. (Retail Mgmt.) in association with Maruti Suzuki Pvt. Ltd. from the A.Y. 2022-23 and B.Com. Mgmt. Studies, B.Com. (Mgmt. Studies - Logistics), B.Sc. Data Science, B.Sc. Cyber Security and M.Sc. Cyber Security from the A.Y. 2024-25.

The Faculty of Science offers a diverse range of undergraduate (UG) and postgraduate (PG) programs designed to foster academic excellence and research-driven learning. In addition to these programs, the faculty has six Ph.D. research centers, supporting advanced studies and contributing to impactful research across various scientific disciplines.

The UGC has sanctioned a Community College for Diploma in Accounting and Taxation in 2015-16.

The College has been Reaccredited by NAAC (4th Cycle - 2024-31) with 'A++' Grade, CGPA-3.51 (One of the Three Colleges in Maharashtra in recent cycle).

The College was granted 'College of Excellence' status by UGC (2015-20). The College has been granted 'Autonomous Status' by UGC and UoM from 2018-19 and is ISO 9001:2015 certified. The College has been conferred 'Empowered Autonomous Status' from the UoM (2023-24 to 2032-33).

Research is an integral part of teaching. 24 faculty members are Ph.D. Guides. Many faculty members have worked on Major and Minor Research Projects and have published research papers and authored books / articles. 50 Patents (31 Granted and 19 Published) have been contributed by the Faculty Members. Faculty members and Students participate in Aavishkar Research Convention at various levels. Many faculty members have visited foreign universities under the Faculty Exchange Program.

The college has IOT and Robotics Lab to provide students with real world skills in IOT and Robotics Technology and iMac Lab to provide hands-on learning experience with Apple technologies.

As an autonomous institution, the College has implemented NEP-2020 as per the guidelines by Govt. of Maharashtra from the A.Y. 2023-24.

The college is an Authorized Partner of the EC-Council, the world's largest cybersecurity technical certification body, known for its globally acclaimed programs. EC-Council certifications are endorsed by distinguished bodies such as the U.S. Federal Government, National Security Agency (NSA), and the Committee on National Security Systems (CNSS).

The depts. of Botany, Chemistry, Microbiology, Physics and Zoology have been awarded 'Star Status' (2017-20) and the depts. of Mathematics, Information Technology and Computer Science have been selected under Star College Scheme (2017-20) by DBT, Govt. of India, New Delhi.

The RUSA, Maharashtra has sanctioned grant of Rs. 5.00 crore to our college for 'Enhancing Quality and Excellence' under Component-8.

The College has been approved as a Potential 'Mentor Institution', by UGC under PARAMARSH scheme (2019-20), 9 Mentee Colleges have been accredited by NAAC.

The College is also recognized under the MARGADARSHAN Scheme of NAAC Bangalore for mentoring of non-accredited institutions (2023-24), 3 Mentee College have been accredited by NAAC.

The College has established Mpower Counselling Cell instituted by our patron Respected Dr. Neerja ji Birla, Founder and Chairperson of Mpower and ABET to provide holistic mental health care solutions.

On the occasion of Celebration of Golden Jubilee Year of our College and Birth Centenary Year of our Founder Pujya Shri B. K. Birla ji, the Postal Stamp was released with the College logo and photo of Pujya Shri B. K. Birla ji by the Dept. of Posts, Govt. of India on 14 October, 2021 at Raj Bhavan, Mumbai.

The College in the pursuit of excellence has attained numerous awards and accolades. The College has been consistently ranked among the best colleges of India in different education surveys nationwide. Recently, the College has been Ranked 1st in 'Campus Planning and Design Excellence' by EducationWorld Grand Jury India Higher Education Rankings (2024-25), Ranked 2nd in India, 1st in Maharashtra and 1st in Mumbai in the category of 'Extraordinary Contribution to Local Community' by EducationWorld Grand Jury India Higher Education Rankings (2023-24); Ranked 1st in Country as 'New Age Study Leader Programme Leader' by EducationWorld (2022-23); Ranked No. 1 as 'Promising Future Ready - Institution' by EducationWorld, India Higher Education Rankings (2021-22) and Ranked 2nd in 'Student Diversity' by EducationWorld (2020-21).

BKBC family stands committed to the cause of excellence in higher education and wish to leave behind a legacy for future generations.

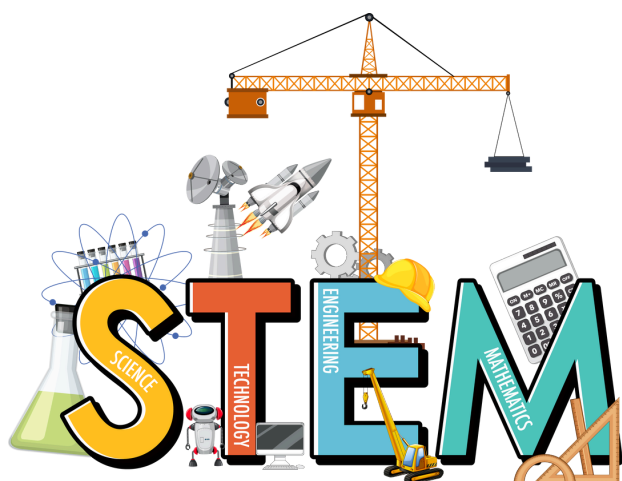
We stand committed for the cause of higher education.

# About Conference



## ICCSAS

Welcome to the official website of the International Conference on 'Computing, STEM, and Applied Sciences (ICCSAS) 2025' to be held from 20-22 March 2025 at B. K. Birla College (BKBC), Kalyan West, India. This event will bring together academicians, researchers, subject experts, technocrats and corporate executives from a wide range of disciplines, including Computing and IT, STEM Education, Learning Technologies, Mathematics and Applied Sciences, Environmental Science and Sustainability, Biotechnology and Life Sciences, and Multidisciplinary Technologies



## Important Dates

Last Date of Abstract  
Submission

**5<sup>th</sup> December 2024**

Early Bird  
Registration

**20<sup>th</sup> December 2024**

Full length paper  
submission with  
Registration

**5<sup>th</sup> January 2025**

Final Submission with  
Registration

**15<sup>th</sup> January 2025**

Camera Ready Copy &  
Submission of Copyright  
Form

**8<sup>th</sup> February 2025**

Registration with late  
fees

**10<sup>th</sup> March 2025**

# ICCSAS 2025 Scope

ICCSAS 2025 will serve a platform for participants to discuss advancements that bridge theory and practice across the various tracks:

- Computing and Information Technology
- STEM Education and Learning Technologies
- Mathematics, Statistics, Physics and Applied Sciences
- Environmental Science and Sustainability
- Biotechnology and Life Sciences
- Multidisciplinary Sciences and Technologies

Through interdisciplinary dialogue and networking, ICCSAS 2025 aims to address emerging challenges and advance education and research in these fields.

## ICCSAS 2025 Indexing/Publishing

Accepted Research Papers for publication will be published in Scopus, Web of Science, UGC Care and Peer reviewed journals.

## ICCSAS 2025 Objectives

1. Promote research and developmental activities across computing, STEM, and applied sciences.
2. Encourage exchange of scientific information among
3. researchers, developers, engineers, students, and industry practitioners.
4. Foster interdisciplinary collaboration to develop innovative solutions to real-world challenges.
5. Provide a platform for participants to share views, insights, and experiences in their respective fields.
6. To publish quality Research Papers in Scopus, Web of Science, UGC Care and Peer reviewed journals.



# Sessions and Tracks

The purpose of this upcoming conference is to let young and experienced researchers worldwide share recent innovations and breakthroughs in relevant fields. ICCSAS-25 calls for abstract and full paper submissions relevant to the following topics (but not limited to).

## Computing and Information Technology

1. Artificial Intelligence & Machine Learning
2. Data Science & Big Data Analytics
3. Cybersecurity & Information Security
4. Blockchain & Cryptographic Systems
5. IoT & Smart Systems
6. Autonomous Robots & Drones
7. Human-Robot Interaction

## Multidisciplinary Sciences and Technologies

1. Human-Computer Interaction (HCI)
2. Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality
3. Quantum Computing
4. Nanotechnology & Materials Science

## Environmental Science and Sustainability

1. Renewable Energy Technologies
2. Sustainable Development & Green Engineering
3. Environmental Modeling & Impact
4. Waste Management & Recycling Technologies
5. Heavy Metal Mitigation

## STEM Education and Learning Technologies

1. Educational Technologies & eLearning
2. STEM Curriculum Development
3. Student-Centered Learning & Assessment
4. Robotics in STEM Education

## Mathematics, Statistics, Physics and Applied Sciences

1. Mathematics & Statistics
2. Physics
3. Engineering Mathematics

## Biotechnology and Life Sciences

1. Omics Technologies
2. Agricultural Biotechnology
3. Medical Biotechnology & Healthcare Innovations
4. Neuroscience & Cognitive Computing
5. Biomedical Engineering
6. Applied Aspects of Plant Sciences
7. Innovation in Nutraceuticals Research and Development
8. Next Generation Diagnostics: Genomics and Beyond Bioinspired Materials for Disease Imaging and Diagnosis
9. Computational Biology Emerging Technologies in Bionanosciences

# Abstract & Paper submission

## Submission of abstract

Prospective authors are encouraged to submit their abstract via mail.

### Guidelines

- Submit your Abstract by the mail: [submission\\_ICCSAS25@bkbck.edu.in](mailto:submission_ICCSAS25@bkbck.edu.in)
- Submission through Mail ID must contain the Full name of the author as well as Co-Authors with Email id, Mobile Numbers.
- The names should match the name written in the registration form. The details entered will be reflected in the Acceptance letter.
- After submission, you will receive an acknowledgement of the receipt via email within **seven working days**. If you do not hear back, please immediately write to us.
- Feel free to write to 'ICCSAS 2025' at [submission\\_ICCSAS25@bkbck.edu.in](mailto:submission_ICCSAS25@bkbck.edu.in) if you have any questions or concerns.
- Authors are requested to always include their paper ID, whenever inquiring about your paper.

## Submission of full paper

Prospective authors will submit their research paper through Microsoft CMT portal: [Click...](#)

### Guidelines

- Prospective authors are encouraged to submit full papers immediately if their abstract is accepted and they have paid the registration fee.
- The paper should be in the format strictly specified as per the paper template available on the website.
- Authors are requested not to submit the same paper multiple times; which may lead to the cancellation of paper.
- All the papers will be checked with advanced plagiarism detection tools like Turnitin or iThenticate.

# Poster Presentation

We are delighted to call for poster presentations at the upcoming International Conference.

## Guidelines

### 1. Poster Specifications

- Dimensions: Posters should be sized at 36 x 48 inches (91 x 122 cm), in portrait orientation.
- Content: Include a clear title, name of the authors, affiliations, abstract, methodology, results, conclusion, and acknowledgments. Ensure text is legible from at least 3 feet away.
- Design: Use high-contrast colors and a clean layout to make your poster visually appealing. Visuals (charts, images, graphs) should be clear and labeled.
- Printing can be done on eco-friendly paper.

### 2. Format for Digital Posters

- Please submit your digital poster in PDF format.
- File size should not exceed 10 MB.
- Name your file as 'LastName\_FirstName\_Poster.pdf' and submit it to submission\_ICCSAS25@bkbck.edu.in on or before **15th December 2024**.
- Once accepted, you need to physically present it in the conference.
- **Registration fee for poster presentation: INR 2000/-**

### 3. Printing and Displaying Your Poster

- Physical posters should be printed by the participant before arriving at the conference venue.
- Poster boards and mounting supplies will be provided on-site.
- Posters should be displayed for the entire day of your presentation and should be removed by the end of the session.

### 4. Q&A and Engagement

- Be prepared to discuss your work and answer questions from attendees.
- Encourage engagement by summarizing key points and sharing unique insights or applications of your research

### 5. Additional Support

- If you require any technical assistance or have questions about the presentation, feel free to contact us at [Contact no: +91 8788070520 / +91 9321234666].

# Registration Details

## Registration Fees

Paper Presentation				
Sr. No.	Details	Registration Fees (In Rs.)		
		Early Bird Registration (Up to 20 Dec. 2025)	Registration (Up to 5 Jan. 2025)	Late Registration (After 5 Jan. 2025)
1	UG and PG Students	2,500/-	3,000/-	4,000/-
2	Research Scholars	2,500/-	3,000/-	4,000/-
3	Academician (Faculty Members)	4,500/-	5,000/-	6,000/-
4	Industry sponsored delegates	9,500/-	10,000/-	11,000/-
5	International delegates	14,500/-	15,000/-	16,000/-
6	Listeners	1,500/-	2,000/-	2,000/-

Poster Presentation			
Sr. No.	Details	Registration Fees (In Rs.)	
		Registration (Up to 15 Dec. 2025)	Late Registration (After 15 Dec. 2025)
1	UG and PG Students	2,000/-	2,500/-
2	Research Scholars	2,000/-	2,500/-
3	Academician (Faculty Members)	3,000/-	3,500/-
4	Industry sponsored delegates	7,000/-	7,500/-
5	International delegates	10,000/-	10,500/-

In case of Cheque, to be drawn in favour of:- B K Birla College Other Expenditure account, Please contact +91 8788070520 / +91 9321234666

## We accept payment by Net Banking / IMPS / NEFT / DD

Please contact our organizing committee for Online payment/ Paypal and Stripe. Participating members may transfer the fees in below bank details:

### Bank Details

Bank Name :- Canara Bank  
Account Name(Beneficiary Name):  
B. K. Birla College Other  
Expenditure  
Account No. - 0209101040623  
IFSC Code- CNRB0000209  
Branch: Kalyan Main Branch

- Delegates must register prior to the registration deadline in order to present their papers.
- Only registered delegates can attend the conference.
- Student delegates are required to attach a proof of their full-time student status.
- Registration fees include Conference kit, Abstract book, Breakfast and Lunch.
- Authors of selected papers / posters, who are registered will get the certificate, along with Conference kit, Abstract book.
- To include the abstract in Conference Abstract Book with ISBN number and further to publish in the Scopus Book Series, 'Research Notes in Computing and Communication Sciences', at least one author has to register and present his/her paper at the conference.
- Selected papers will be published in Scopus Indexed/ WOS indexed/ UGC Care listed/Peer Reviewed Reputed Journal or Book Series of respective discipline by the required review process and policy of that publisher, after the conference.
- Ph.D. Scholars / Research Fellows will be considered under Research Scholar Category.
- Registered candidates cannot claim for refund on their absence in the conference.
- Delegates are requested to arrange for their accommodation on their own, if required.
- Contact details and information of some Hotels are mentioned on page no 13
- No accompanying person who has not registered will be allowed in the conference.

\* Terms & conditions applied for journals\*

After Payment Download the Registration Form fill it and send to to [submission\\_ICCSAS25@bkbck.edu.in](mailto:submission_ICCSAS25@bkbck.edu.in)



# Organizing Committee

## Chief Patron

**Mr. O. R. Chitlange**

CEO, Grasim Industries Ltd. (VFY-Fashion Yarn Business) and  
Chairman, Governing Council,  
BKBC, BKBPS and BKBNC, Kalyan

## Patron

**Mr. Subodh Dave**

Vice Chairman, Governing Council,  
BKBC, BKBPS and BKBNC, Kalyan

## Chairman

**Dr. Naresh Chandra**

Director (Education), BKBC

## Co-Chairman

**Dr. Avinash Patil**

Principal, BKBC

## Convener

**Dr. Seema Purohit**

Professor Emeritus, BKBC

## Organizing Secretary

**Mrs. Esmita Gupta**

Vice Principal (Unaided), BKBC

**Dr. Harish Dubey**

Vice Principal (Admin), BKBC

## Joint Secretary

**Mr. Vinod Rajput**

HOD, CS, BKBC

**Dr. Vilas Khairnar**

HOD, Chemistry, BKBC

## Treasurer

**Mr. Prakash Sansare**

HOD, Mathematics, BKBC

## Technical Committee

**Dr. Avinash Patil   Mrs. Seema Purohit   Dr. Maninder Dhaliwal   Dr. Sandesh Jaybhaye**

## In Charge of Tracks

**Dr. Seema Purohit**

**Mrs. Esmita Gupta**

**Dr. Maninder Kaur Dhaliwal**

**Dr. Mahendra Khandpekar**

**Mr. Prakash Sansare**

## Members

- |                               |                           |                        |                         |                          |
|-------------------------------|---------------------------|------------------------|-------------------------|--------------------------|
| 1) Dr. Maninder Kaur Dhaliwal | 2) Dr. Meeta Bhot         | 3) Dr. Vinod Narayane  | 4) Dr. Vijay Jadhav     | 5) Dr. Sandesh Jaybhaye  |
| 6) Dr. Mahendra Khandpekar    | 7) Dr. Seema Manchanda    | 8) Dr. Pranjali Maskar | 9) Dr. Archana Singh    | 10) Dr. Datta Kshirsagar |
| 11) Dr. Shivani Kakkar        | 12) Dr. Sonali Patil      | 13) Dr. Sonal Tawde    | 14) Dr. Vandana Gupta   | 15) Dr. Minal Trivedi    |
| 16) Dr. Saheli Pradhan        | 17) Mr. Balasaheb Pathare | 18) Dr. Sneha Dhokale  | 19) Dr. Mugdha Pathak   | 20) Dr. Priyanka Jawade  |
| 21) Mrs. Kajal Jaisinghani    | 22) Mrs. Pritam Kamble    | 23) Mr. Akash Kamble   | 24) Mrs. Vandana Mourya | 25) Mrs. Rohini Patil    |
| 26) Mrs. Hemangi Rane         | 27) Mrs. Vrinda Patil     |                        |                         |                          |

# Proceedings & Publications

All the Abstracts will be included in the proceedings/abstract book with ISBN: 9788195143191

The Scopus logo is displayed in orange text within a black rectangular border.The Clarivate Analytics logo, featuring a stylized 'C' icon, is positioned above the text 'Clarivate Analytics' and 'WEB OF SCIENCE™' within a black rectangular border.

**Selected Papers after review will be published in the Proceedings/Book Series 'Research Notes on Computing and Communication Sciences', which is Scopus Indexed and published by CRC Press(AAP imprint) under Taylor and Francis Group.**

Delegates will get an opportunity to publish their papers in reputed Peer Reviewed indexed Journals, with well-known indexes with our publishing partner Labtech Innovations, as per the acceptance and policy of the journals.

**We are home to the publishing of all well-known indexes.**

The Scopus logo is displayed in orange text.The Clarivate Analytics logo, featuring a stylized 'C' icon, is positioned above the text 'Clarivate Analytics' and 'WEB OF SCIENCE™'.The Embase logo is displayed in orange text.The SJR logo is displayed in white text on an orange rectangular background.The PubMed logo is displayed in blue text with a stylized book icon.The ABDC logo, featuring the text 'ABDC' and 'AUSTRALIAN BUSINESS DEANS COUNCIL'.The Compendex logo, featuring a stylized 'E' icon, is positioned above the text 'Compendex'.The DOAJ logo, featuring a stylized 'D' icon, is positioned above the text 'DOAJ'.The Google Scholar logo, featuring a stylized graduation cap icon, is positioned above the text 'Google Scholar'.The UGC CARE (INDIA) logo, featuring a circular emblem with a sunburst design, is positioned above the text 'UGC CARE (INDIA)'.

# ICCSAS 2025 Awards



All the winners will be given their awards during the award ceremony, which will be held on the last day of the conference at its valedictory functions.

## Award Categories



### The Best Presentation Award

This award will be presented to the most outstanding presentation in the conference.



### The Best Paper Award

There will be a number of technical sessions in the conference under various themes. The Best Paper Award will be given to the presentations that have been selected as the best in the particular session.



### The Best Student Presentation Award

This award will be given to the most outstanding presentation delivered by a participant whose registration is in the student category. (Undergraduates, Master students, and Ph.D. students)



### The Best Poster Presentation Award

There will be a poster session at the conference and this award is dedicated to the poster presenters in the conference. The best poster presentation will be selected among all the researchers in the session. (Undergraduates, Master students, and Ph.D. students)



### Best Innovation/Research Idea Award

The Best Innovation/Research Idea Award will be given to the most Innovation/Research Idea presented by a participant who has registered under the student category. (Undergraduates, Master students, and Ph.D. students)

# Venue



Birla College of Arts, Science & Commerce, established in 1972, is an affiliate of the University of Mumbai in India. It is accredited by National Assessment and Accreditation Council and awarded an 'A' Grade. It is a multi-faculty institution of higher education with an enrolment of more than 11,900 students.

Mumbai, also known as Bombay, is the financial, commercial, and entertainment capital of India. Located on the west coast of India, it is the largest city in the country by population and one of the most populous urban regions in the world. Mumbai is known for its fast-paced lifestyle, diverse culture, and historical landmarks.



# How to reach to B. K. Birla College, Kalyan, Maharashtra, India



## BY ROAD AND PUBLIC TRANSPORT

Easily reachable from Airport as well as from any part of Mumbai / Pune and other cities by road (Bus, Private cab) and public transport (Railway)

## Nearer Railway Station

Kalyan(Junction)Station(Central Railway) - 3.2 km.  
To reach to Birla College from Kalyan Railway Station - By Road (Take share or direct Auto or cab)



## Nearer International Airport

- Chhatrapati Shivaji Maharaj Domestic Airport (Santacruz Airport) (Terminal 1) – 51.3 km
- Chhatrapati Shivaji Maharaj International Airport (Sahar Airport) (Terminal 2) – 43.9 km
- Reaching to Birla College from the airport - By Road (By Private Vehicles / Cabs)

# Accommodation



## Hotel Gurudev Grand

B. K. Birla College Road, Gurudev Darshan,  
Near Adharwadi Circle, Highway Road, Kalyan  
(W), Maharashtra 421301

Distance from College :- 2.2 Km

Link :- <https://hotelgurudevgrand.co.in>

Contact Number :- 9820147777

## Hotel Heritage Residency

Purnima Chowk, Above Maruti Suzuki  
Showroom, Sadanand Sankool, Kalyan-Murbad  
Rd, Kalyan (W), Maharashtra 421301

Distance from College :- 1.1 Km

Contact Number :- 9820665538



## Hotel Vegas Residency

B. K. Birla College Road, Kalyan (W),  
Maharashtra 421301

Distance from College :- 500 m

Contact Number :- 9594377770 / 7620447571

## Palms Water Resort

Next Roshan Petrol Pump, Kalyan-Murbad Rd,  
Syndicate, Kalyan, Maharashtra 421301

Distance from College :- 1.3 Km

Contact Number :- 8655570135





# Get in Touch



## Our Contact



+91 8788070520 / +91 9321234666



[ICCSAS-2025@bkbck.edu.in](mailto:ICCSAS-2025@bkbck.edu.in)



[www.bkbirlaconference.in](http://www.bkbirlaconference.in)



<https://bkbck.edu.in>



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