



in Collaboration with GTOGETHER

CHANDIGARH





# **A SHORT TERM** COURSE

**COMPUTER VISION APPLICATIONS USING OPEN CV** Through ICT



Organized by **DEPARTMENT OF INFORMATION TECHNOLOGY** (B.Tech IT – Accredited By NBA)



## GALGOTIAS COLLEGE OF ENGINEERING AND TECHNOLOGY

Plot No. 1, Knowledge Park -2, Greater Noida, U.P. www.galgotiacollege.edu



### **ABOUT GALGOTIAS COLLEGE OF ENGINEERING AND TECHNOLOGY**

Galgotias College of Engineering & Technology (GCET) was founded by Smt. Shakuntla Educational and Welfare Society. Shri. Suneel Galgotia, a resolute visionary committed to providing world-class technical and management education, is the founder and Chairman, apart from being the Chancellor of Galgotias University and Managing Director of Galgotia Publications Pvt. Ltd., New Delhi.

Galgotias College of Engineering & Technology is approved by AICTE, Ministry of HRD, and Government of India and affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow.

Galgotias College of Engineering & Technology, established in 2000, synergizes theoretical knowledge and practical skills to promote all- round professional competence. Galgotias College of Engineering & Technology has acquired a unique status in UP, the NCR region and the country by breaking new grounds in

producing professionals of national and international acclaim and has been recognized as one of the top ranking institutions imparting high-quality education.

The Campus, spread over 19 acres, is located on an 8-lane expressway connecting Greater Noida with Noida and New Delhi. It is truly a self- sufficient campus with spacious and beautifully academic buildings, separate, fully secure and comfortable hostels for boys and girls, seminar and conference halls as well as indoor and outdoor games facilities and a multi-cuisine cafeteria

#### **About the IT Department**

The IT Department, or Information Technology Department, is a fundamental division within organizations dedicated to managing and leveraging technology resources. It encompasses a wide array of functions crucial to modern operations, including network administration, software development, technical support, cybersecurity, and data management. This department ensures the seamless functioning of digital systems, providing user assistance, implementing software updates, and safeguarding against cyber threats. Its role extends beyond maintenance to strategic planning, as it identifies and integrates innovative technologies that align with the organization's objectives. In a rapidly evolving tech landscape, the IT Department plays a pivotal role in optimizing communication, data storage, and operational efficiency. Its contributions enable businesses to remain competitive, agile, and secure while harnessing the power of technology to enhance processes, drive innovation, and achieve strategic growth.

STC ON "COMPUTER VISION APPLICATIONS USING OPEN CV" (ICT-15).





### **ABOUT THE COURSE**

Open CV (Open Source Computer Vision Library) is a powerful and widely-used open-source library that provides tools for real-time computer vision applications. It offers a comprehensive suite of functions for image and video processing, making it indispensable in various industries. Face detection and recognition are among the most popular applications of computer vision, and OpenCV provides powerful tools to accomplish these tasks. It involves locating faces within images or video streams, while face recognition goes a step further by identifying individuals based on their facial features. From security and surveillance to user authentication and entertainment, this technology has a wide range of uses. Object tracking is a crucial component in computer vision applications that involve monitoring the movement of specific objects within a video stream or sequence of images.

CHIEF PATRON	CONVENER	
Shri. Suneel Galgotia	Dr. Sanjeev Kumar Singh	
Chairman	Professor & HOD	
Galgotias Educational Institutions	Department of IT	
PATRONS	FDP COORDINATOR	
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# **REGISTRATION STEPS:**





**05 STEP** 

**APPLY FOR ICT-15**: **COURSE TITLE – "COMPUTER VISION APPLICATIONS USING OPEN CV**"

**06 STEP** 

**SELECT REMOTE CENTRE AS DEPARTMENT OF IT, GCET, IN REGISTRATION FORM.** 

# **Note: REGISTRATION FEE: RS. 590**

Upon successful registration, submit the form to FDP Coordinator and join the WhatsApp group *https://chat.whatsapp.com/KzUamdbQkz6LWe05v7YGOV* Kindly contact FDP Coordinator for any query.

DAY	Session – 1 10 AM to 11:30 AM	Session – 2 11:30 AM to 1 PM	Session – 3 3:00 PM – 4:30 PM
26/05/2025	Introduction to OpenCV and Image Operations Manipulations	Essentials of Python	Python Programming for Computer Vision Applications
27/05/2025	Real-Time Object Detection using Haar Cascades and its customization	Image Feature Detection, Description, and Matching Techniques using OpenCV	Traffic Sign Image Classification using OpenCV and CNN
28/05/2025	Document Forgery Detection using OpenCV	Signature Verification System using OpenCV	OpenCV for Industrial Quality Control: Automated Defect Detection in Manufacturing
29/05/2025	Building Al Models with Low-Code Platforms for Vision Applications	Face Detection and Recognition using OpenCV	Explainable AI (XAI) in Vision Applications
30/05/2025	Object Tracking By Color using OpenCV	Advanced Image Processing Operations (Edge, Contour, Color Detection, Morphological Operations) using OpenCV	Online Quiz, Feedback and Valediction



