

DEPARTMENT OF INFORMATION TECHNOLOGY

INFOBUZZ

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Bi-annual Newsletter



PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Kurukshetra University, Kurukshetra)

IT DEPARTMENT'S

VISION

To create globally competent professionals by imparting quality technical education, research aptitude and analytical skills to meet challenges in IT industry, thus contribute to the welfare of society.

MISSION

M1: To nurture students with knowledge and programming skills of different IT domains necessary for development and testing of quality software solutions.

M2: To provide an integrated, responsive and comprehensive academic ecosystem with enhanced teaching and learning to promote intellect and excellence in research.

M3: To mentor students with applied problem solving and critical thinking leading to innovative and sustainable solutions to societal problems.

M4: To collaborate and exchange expertise with industry, research organizations and academic institutions.

PROGRAM EDUCATIONAL OBJECTIVES

To create globally competent professionals by imparting quality technical education, research aptitude and analytical skills to meet challenges in IT industry, thus contribute to the welfare of society.

PROGRAM SPECIFIC OBJECTIVES

PSO1

Design, develop and test software applications and project management solutions of real world problems.

PSO2

Be competent in emerging areas of Information Technology

IT DEPARTMENT'S

PROGRAM EDUCATIONAL OBJECTIVES

The graduates will have core competencies in IT fundamentals necessary to solve hardware, software and integrated engineering problems relevant to IT industries.

The graduates will be proficiently engaged in development of IT products and services to cater to the industry needs or perform as innovators or entrepreneurs.

The graduates will successfully pursue higher education or career paths in research.

The graduates will professionally function with social awareness, responsibility and ethical norms.

PROGRAM SPECIFIC OBJECTIVES

PSO1

Design, develop and test software applications and project management solutions of real world problems.

PSO2

Be competent in emerging areas of Information Technology

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MS. SHILPI GUPTA

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DESIGNER)**



**GINNI GUJJAR
(DESIGNER)**



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One Day Workshop on Artificial Intelligence

The Department of Information Technology organized one day workshop on Artificial Intelligence on 5 th April 2023. Mr Jitendra Kumar, Data Scientist at Appwars Technology Pvt. Ltd., Noida was resource person for the workshop. The main objective of the event was to make students aware about the various opportunities that lie with Artificial Intelligence and its allied branches viz Machine Learning and Data Science. The session started with the industrial trends in the field of Artificial Intelligence. He emphasized on developing skills in Python for better prospects in area of AI. He demonstrate a project titled “How to change the background of a video” using Python and OpenCV. The hands-on session was focused on building blocks to accomplish the task. The session explored various options available with OpenCV to manipulate the images and videos. Among various options, PixelLib function was demonstrated to be good option to control various features of image and videos. The resource person examined the projects executed by the students and gave them useful feedback to improve on the project. The session ended with vote of thanks to resource person.



Expert Talk on Drone Technology

The event was a seamless blend of academic discourse and practical insights, offering attendees a comprehensive understanding of drone technology and its potential. Dr. Bhavesh Vyas's presentation was not only educational but also engaging, captivating the audience's interest throughout the session. Propulsion system, sensors and cameras, communication system, and flight control autonomy have all been very clearly detailed by Dr. Vyas. Additionally, he demonstrated other pieces of equipment, including motors, propellers, a flight controller, sensors, and communication. The lecture by Dr. Bhavesh Vyas not only met its goals of educating the audience about cutting-edge technology, encouraging the use of drones, and inspiring the next generation, but it also had a profound effect on everyone in attendance. The session was concluded by vote of thanks by Himanshi and honouring of our guest by presenting him sapling and award of honour.



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Techno GearHeads club of the Department of Information Technology is organising an expert talk on Drone Technology

Convener:
Dr. Neeraj Gupta

Co-convener:
Mrs. Rashmi Makkar

Date - 16th September, 2023
Time - 9:30 Onwards
Venue - E-507
Fourth Floor, E block

Dr. Bhavesh Vyas
Assistant dean (Ph.D program)
KR Mangalam University
Gurugram



Alumni Talk on the topic “Cloud & Kubernetes”

The Department of Information technology has organized an Alumni Talk on the topic “Cloud & Kubernetes: Insights from our Alumni” by our Alumni Er. Amit Gera on 13th October’23. The lecture covered essential topics on cloud and Kubernetes. These topics includes the gain insights into real world application, informed us about the latest industry-trends, focus on practical challenges & solution, aware us about career opportunities, recognize the importance of networking & community building, focus on continuous learning in the fast-evolving field of technology



Orientation Day Program

The Department of Information Technology organized an Orientation Day Program (for IT 2nd ,3rd ,4th year student's) on 19th August 2023. This orientation program was conducted for students and parents to disseminate Vision, Mission, PEO & PSO and to register students in their respective years by verifying their document's, also to aware them about the rules, regulations and policies of the department in terms of academics / examinations / discipline and T&P/ co-curricular/ extra-curriculum activities of the IT Department. Director Sir, Prof (Dr) J.S. Saini graced the event with his presence and shared very valuable lessons with the audience. Head of IT Department, Prof (Dr) Neeraj Gupta also motivated the students to remain active throughout the semester and urged the parents to maintain a regular check on their wards. The event was concluded by query sessions and vote of thanks.



ONE DAY WORKSHOP ON COMPUTER HARDWARE ASSEMBLING

One Day Workshop on Computer Hardware Assembling was organized on 25th August 2023 by Department of information technology. The one-day hardware assembling workshop was a resounding success, providing participants with valuable knowledge and hands-on experience in computer hardware assembly. The event achieved its objectives of educating participants about hardware components, enhancing their practical skills, and promoting a greater understanding of computer maintenance. Participants left the workshop with newfound confidence in building and maintaining their computer systems. The organizers are committed to continuing educational initiatives in the field of computer hardware and look forward to hosting similar workshops in the future.



SEMINAR ON CONSTITUTIONAL OBLIGATIONS FOR STUDENT

The session started with some interactive questions like what do you mean by rights, duties? What makes them different from one another? The expert emphasized the significance of being aware of one's rights, obligations, and ideals as an Indian citizen. The expert educated pupils to the various types of responsibilities, liberties, and values that Indian citizens are expected to understand. Each and every topic was covered in detail with the aid of 2 of pertinent examples from actual events. The expert also highlighted the institution's duties. An interactive session followed the lecture. Dr. Shobhna responded to the attendees' questions about numerous topics. The session's organizer gave a thank-you speech before the meeting adjourned. The students were enlightened about their constitutional rights, obligations, and duties that will help them to be more responsible citizen.



Extension Activity - Skill based teaching – MS Excel

The Department of Information Technology, Panipat Institute of Engineering and Technology, conducted a skill-based education program on Microsoft Excel to the 10+2 commerce and humanities students at the school. The program was conducted for 45 hours on the school campus. Twenty-four students from Government Senior Secondary School, Pattikalyana, participated in the skilling classes. The program was held from September 12, 2023 to November 17, 2023. The course was delivered in three phases. Beginners Level, Intermediate Level and Advanced Level. The duration of the Beginners level was 10 days. This level contains the basic introduction to MS Excel, formatting of cells, basic formulas, simple charts and bars and working with rows and columns. The duration of the Intermediate level was 15 days and contains advanced formatting, logical functions, data management and data visualisation. The duration of the advanced level was 15 days. This level contains macros, pivot tables and VLOOKUP etc. Each day, the theory classes and hands-on training was conducted. The Govt. Senior Secondary School, Pattikalyana, Samalkha, offered the slot of 1 hour every day for theory in the school time table. After each and every phase the test was conducted for evaluation of students..



Student Achievement

1. Neha participated in Talent Hunt (Speech) at PIET, IT Department and secured First position.
2. Ridham participated in Talent Hunt (Dance) at PIET, IT Department and secured First Position.
3. Ruksana participated in Talent Hunt (Poetry) at PIET, IT Department and secured First Position.
4. Shoaib participated in National Youth Festival (Volley-ball) at MMU and secured Second Position.
5. Nikhil Yadav participated in National Youth Festival (Volley-ball) at MMU and secured Second Position.
6. Aryan Mangla participated in GIET QIZOTIKA at Gateway Institute of Engineering & Technology and secured First Position.
7. Dev Chugh participated in GIET QIZOTIKA at Gateway Institute of Engineering & Technology and secured First Position.

Faculty Achievement

- Sandeep Goel, affiliated with PIET at the time of publication, authored a paper titled "Machine Learning based Classifier Models for Detection of Celestial Objects," which was published in the proceedings of the 3rd International Conference on Intelligent Technologies (CONIT) in 2023. The conference was of international stature, and the proceedings were published by IEEE, with the ISBN number 979-8-3503-3860-7.
- Sandeep Goel, affiliated with PIET at the time of publication, authored a paper titled "Drive Drowsiness Detection Using Deep Learning," which was published in the proceedings of the 3rd International Conference on Intelligent Technologies (CONIT) in 2023. The conference was of international stature, and the proceedings were published by IEEE, with the ISBN number 979-8-3503-3860-7.
- Neeraj Gupta, affiliated with PIET at the time of publication, authored a book titled "Design and Analysis of Algorithm," published in 2023 by Scientific International Publishing House. The book was published nationally and carries the ISBN number 978-93-5757-197-5.
- Neeraj Gupta, affiliated with PIET at the time of publication, authored a book titled "IOT Architecture and Design (Internet of Things in modern Computing Theory and Applications)," published in 2023 by CRC Press. The book was published nationally and carries the ISBN number 9781032392721.
- The paper titled "WMN Routing: State of the Art Survey" by Rattan Deep Aneja from the Department of IT was published in the "International Journal of Management, Technology, and Engineering" in 2019. The journal's ISSN number is 2249-7455, and it can be accessed via their website: <https://www.ijamtes.org/>. The article itself is available at [[this link](https://app.box.com/s/67d7pxgt23x34vixbtj313nf0yn4i11r)] (<https://app.box.com/s/67d7pxgt23x34vixbtj313nf0yn4i11r>). Additionally, it is listed in the UGC Care list.

- The paper titled "Inside the Mind of the Machine: An Exploratory Study of Street Fighter Players Using Voice Recognition System" by Ashima Arya from the Department of IT was published in the "Asian Journal of Computer Science and Technology, Technology," in Dec 2020. The journal's ISSN number is 2249-0701, and it can be accessed via their website: <https://ojs.trp.org.in/index.php/ajcst/home>. The article itself is available at [this link]<https://doi.org/10.51983/ajcst-2020.9.2> .
- The paper titled "One QR CODE for ticketing system" by Ashima Arya from the Department of IT was published in the "Journal of Multimedia Technology & Recent Advancements, " in 2020. The journal's ISSN number is 2349-9028, and it can be accessed via their website: <https://stmcomputers.stmjournals.com/index.php/JoMTRA>.
- The paper titled "Green Renewable Systems: A Review" by Ashima Arya from the Department of IT was published in the "International Journal of Renewable Energy and its Commercialization" in June 2021. The journal's ISSN number is 2582-4120, and it can be accessed via their website:<https://stmjournals.in/international-journal-of-renewable-energy-and-its-commercialization/>.
- The paper titled "Optimal Path Routing In WMNS: HGAB3C" by Rattan Deep Aneja from the Department of IT was published in the "International Journal of Intelligent Engineering informatics" in July 2021. The journal's ISSN number is 1758-8715, and it can be accessed via their website:<https://www.inderscienceonline.com/journal/ijiei>. The article itself is available at [this link]<https://doi.org/10.1504/IJIEI.2021.10040069>.

- The paper titled "A Soft Computing Based Novel Hybrid Optimization Algorithm H3PGAB3C And Its Application To Routing In WMNS" by Rattan Deep Aneja from the Department of IT was published in the "International Journal of Information Technology" in 2022. The journal's ISSN number is 2511-2104, and it can be accessed via their website:<https://www.springer.com/journal/41870/>. The article itself is available at [this link]<https://doi.org/10.1007/s41870-022-01013-9>.
- The paper titled "A Novel Method for Securing Online Banking Transactions" by Ashima Arya, Neha Bhatia, Bhawna Kukreja, Payal Chhabra from the Department of IT was published in the "International Journal of Information Technology" in 2022. The journal's ISSN number is 2349-6002, and it can be accessed via their website:<https://ijirt.org/index>. The article itself is available at [this link]<https://ijirt.org/Article?manuscript=155367>.
- The paper titled "Multivariate economic analysis of the government policies and COVID-19 on financial sector" by Vaishali Mehta from the Department of IT was published in the "International Journal of Computer Applications in Technology" in 2022. The journal's ISSN number is 0952-8091, and it can be accessed via their website:<https://www.inderscienceonline.com/journal/ijcat>. The article itself is available at [this link]<https://doi.org/10.1504/IJCAT.2021.120460>. Additionally, it is listed in the UGC Care list.
- The paper titled "Diagnosing of Disease using Machine Learning in Healthcare by Internet of things" by Neeraj Gupta from the Department of IT was published in the "International Journal of Intelligent Systems and Applications in Engineering" in 2023. The journal's ISSN number is 2147-6799, and it can be accessed via their website:<https://ijisae.org/index.php/IJISAE>. The article itself is available at [this link]<https://ijisae.org/index.php/IJISAE/article/view/3388>. Additionally, it is listed in the UGC Care list.

- The paper titled "An Innovative Cryptography Safety Algorithm Called S-RSB-23 for Protecting Data Using Machine Learning Algorithm" by Nitisha Aggarwal from the Department of IT was published in the "International Journal of Intelligent Systems and Applications in Engineering (IJISAE)" in 2023. The journal's ISSN number is 2147-6799, and it can be accessed via their website:<https://ijisae.org/index.php/IJISAE>. The article itself is available at [\[thislink\]https://ijisae.org/index.php/IJISAE/article/view/3650](https://ijisae.org/index.php/IJISAE/article/view/3650). Additionally, it is listed in the UGC Care list.
- The paper titled "Optimization of Customer Requirements in Automobile Industry Using the Intelligent Agent Analytical Hierarchy Process" by Nitisha Aggarwal from the Department of IT was published in the "International Journal of Intelligent Systems and Applications in Engineering (IJISAE)" in 2024. The journal's ISSN number is 2147-6799, and it can be accessed via their website:<https://ijisae.org/index.php/IJISAE>. The article itself is available at [\[thislink\]https://ijisae.org/index.php/IJISAE/article/view/4601](https://ijisae.org/index.php/IJISAE/article/view/4601). Additionally, it is listed in the UGC Care list.
- The paper titled "Securing Digital Records: A Synergistic Approach with IoT and Blockchain for Enhanced Trust and Transparency" by Neeraj Gupta from the Department of IT was published in the "International Journal of Intelligent Systems and Applications in Engineering (IJISAE)" in 2024. The journal's ISSN number is 2147-6799, and it can be accessed via their website:<https://ijisae.org/index.php/IJISAE>. The article itself is available at [\[thislink\]https://ijisae.org/index.php/IJISAE/article/view/4528](https://ijisae.org/index.php/IJISAE/article/view/4528). Additionally, it is listed in the UGC Care list.

- Ms. Neha, a B.Tech. student in Information Technology, has patented a groundbreaking invention titled "Multiutility Brush with Refillable Cleanser Tube and Spraying Mechanism," with the patent number 392875-001. This innovation, published on October 13, 2023, introduces a versatile brush designed with a refillable cleanser tube and spraying mechanism, offering users a convenient and effective cleaning solution.
- Ms. Urvinder Kaur, a B.Tech. student in Information Technology, has patented a groundbreaking invention titled "Multiutility Brush with Refillable Cleanser Tube and Spraying Mechanism," with the patent number 392875-001. This innovation, published on October 13, 2023, introduces a versatile brush designed with a refillable cleanser tube and spraying mechanism, offering users a convenient and effective cleaning solution.
- Mr. Sandeep Goel, a B.Tech. student in Information Technology, has patented a groundbreaking invention titled "Multiutility Brush with Refillable Cleanser Tube and Spraying Mechanism," with the patent number 392875-001. This innovation, published on October 13, 2023, introduces a versatile brush designed with a refillable cleanser tube and spraying mechanism, offering users a convenient and effective cleaning solution.
- Ms. Rashmi Makkar, a B.Tech. student in Information Technology, has patented a groundbreaking invention titled "Multiutility Brush with Refillable Cleanser Tube and Spraying Mechanism," with the patent number 392875-001. This innovation, published on October 13, 2023, introduces a versatile brush designed with a refillable cleanser tube and spraying mechanism, offering users a convenient and effective cleaning solution.