



CIRCULAR





Circular

Ref. No. AJU/AD/ENGG/019/2025-26

The Short Term Certificate Course on "Pattern Recognition and Image Analysis in association with IIC" is going to be jointly organized by Department of Electrical & Department of Electronics Engineering and Department of Mechanical Engineering, School of Engineering & Department of Electrical & Department of Electrical & Department of Electronics Engineering & Department of Mechanical Engineering, School of Engineering & Department of Electronics Engineering & Department of Mechanical Engineering & Department of Electronics Engineering & Department of Mechanical Engineering & Department & De

Link for registration: https://forms.gle/7Zvbn7VHScUAtu7e6

Mode of learning: Hybrid Mode

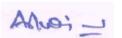
Registration fee: Nil

Max no. of Participants: 30

Last Date for Registration: 30.07.2025 (till 7:00.P.M)

Coordinators:

Dr. Amit Prakash sen (dr.amit@arkajainuniversity.ac.in), 7858837380
Dr. Anup Kumar (dr.amup@arkajainuniversity.ac.in), 8092223770
Dr. Chandra Prabha Sahu (dr.chandra@arkajainuniversity.ac.in), 7979773885
Prof. Taniya Ghosh (taniya.g@arkajainuniversity.ac.in), 7978228744



Date: 28.07.2025

Dr. Ashwini Kumar Assistant Dean School of Engineering & IT Arka Jain University, Jharkhand

Copy for information & necessary action please: -

- 1. PS to The Vice-Chancellor
- 2. PS to The Director
- 3. PS to DSW/Director Campus
- 4. Controller of Examination for information
- 5. PS to The Registrar
- 6. In charge Web services for Website
- 7. Notice Board
- 8. Guard File





"PATTERN RECOGNITION AND IMAGE ANALYSIS"

Date of Event	31.07.2025 to 05.08.2025
Name of the Event	STTP on "Pattern Recognition and Image Analysis"
Type of the Event	Skill Development
Conducted by	Department of Electrical & Electronics Engineering and Department of Mechanical Engineering, School of Engineering & IT, ARKA JAIN University in association with Innovation Council Cell
Co-ordinator	Dr. Amit Prakash Sen, Dr. Chandra Prabha Sahu, Dr. Anup Kumar, and Prof. Taniya Ghosh
No. Of Participants	30

OBJECTIVE

This course is designed to enable students to:

This course was designed to enable students and faculty to:

- Understand the fundamentals and applications of pattern recognition and image analysis.
- Develop skills in feature extraction, image preprocessing, and classification techniques.
- Gain exposure to advanced algorithms including machine learning and deep learning for image processing.
- Enhance problem-solving abilities for real-world applications in computer vision and AL

Foster collaborative and interdisciplinary learning.

Description

The Short Term Training Program (STTP) on "Pattern Recognition and Image Analysis" was organized from 31st July 2025 to 5th August 2025 in online mode by the Department of Electrical & Electronics Engineering, School of Engineering & IT, ARKA JAIN University, in association with the Innovation Council Cell. The program brought together participants from diverse academic and professional backgrounds, aiming to build a strong foundation and advanced competence in the field of pattern recognition and image analysis.

With the rapid growth of artificial intelligence, computer vision, and deep learning,





the ability to extract meaningful information from images has become a critical skill in industries such as medical diagnostics, remote sensing, security & surveillance, autonomous vehicles, and industrial automation. This STTP was carefully designed to provide conceptual clarity, practical skills, and research orientation to participants through a mix of lectures, demonstrations, and hands-on practice.

The program was conducted by the following speakers:

- Dr. Amit Prakash Sen, Assistant Professor, Department of Electrical & Electronics Engineering
- Dr. Anup Kumar, Assistant Professor, Department of Mechanical Engineering
- Mrs. Taniya Ghosh, Assistant Professor, Department of Electrical & Electronics Engineering
- Dr. Chandraprabha Sahu, Assistant Professor, Department of Electrical & Electronics Engineering

Program Flow:

- Day 1 (31/07/2025) Inaugural session followed by an introduction to pattern recognition systems, historical development, and classification approaches. Concepts of image formation, acquisition, and basic preprocessing methods (contrast enhancement, noise reduction) were demonstrated using MATLAB and Python.
- Day 2 (01/08/2025) Covered feature extraction techniques, including edge detection, texture analysis, and shape descriptors. Dimensionality reduction using PCA and LDA was explained with live coding sessions.
- Day 3 (02/08/2025) Detailed discussion on classification algorithms such as k-NN, SVM, Decision Trees, and Naïve Bayes. Participants implemented these algorithms on real-world image datasets using OpenCV and scikit-learn.
- Day 4 (04/08/2025) Focus on deep learning for image analysis, particularly Convolutional Neural Networks (CNNs). Participants learned about architecture design, training strategies, and transfer learning for applications such as facial recognition and medical image classification.
- Day 5 (05/08/2025) Capstone project day: Participants worked in small teams to apply learned concepts to mini-projects. Topics included vehicle detection, fruit ripeness classification, and medical X-ray analysis. Final presentations were followed by a panel discussion on research trends, industry use cases, and ethical aspects of AI in image analysis.

Assessment & Certification:

To evaluate the learning outcomes, an online examination was conducted on 12th August 2025. Out of 30 registered participants, 28 appeared for the examination, and 27 successfully passed, receiving certificates of completion.

Participant Engagement:

The program was marked by high levels of interaction, with participants actively engaging in Q&A sessions, coding challenges, and project work. The blend of theory, practice, and collaborative learning created an environment conducive to skill enhancement and critical thinking.





Feedback & Impact:

Feedback collected from participants reflected a high degree of satisfaction with the content, delivery, and practical orientation of the program. Many reported gaining confidence in implementing image analysis techniques and expressed interest in pursuing further research or industry projects in the domain. The event not only

Enhanced technical proficiency but also encouraged innovative thinking and interdisciplinary collaboration.

OUTCOMES:

By the end of the STTP, participants were able to:

- Apply image preprocessing and feature extraction techniques.
- Implement pattern recognition algorithms using MATLAB and Python.
- Evaluate and compare different classification approaches.
- Work collaboratively on small-scale image analysis projects.
- Identify research problems and potential industrial applications in computer vision.





POSTER OF THE EVENT







SCHOOL OF ENGINEERING & IT

Organizes

Short Term Training Program

Pattern Recognition and Image Analysis in association with IIC

From 31st July, to 5th Aug, 2025 Link for registration: _
https://forms.gle/7Zvbn7
VHScUAtu7e6

Coordinator:

Dr. Amit Prakash Sen

Dr. Chandra Prabha Sahu

Dr. Anup Kumar

Prof. Taniya Ghosh

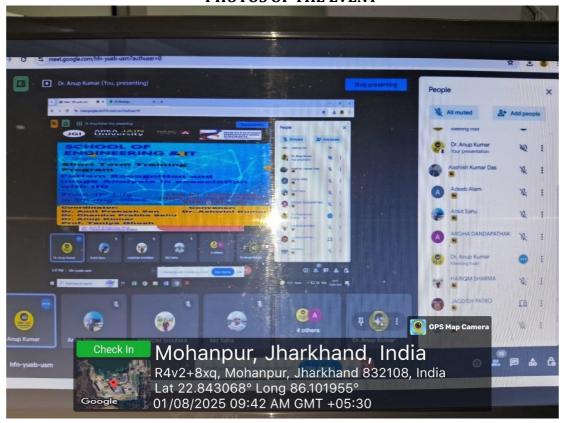
Convenor:

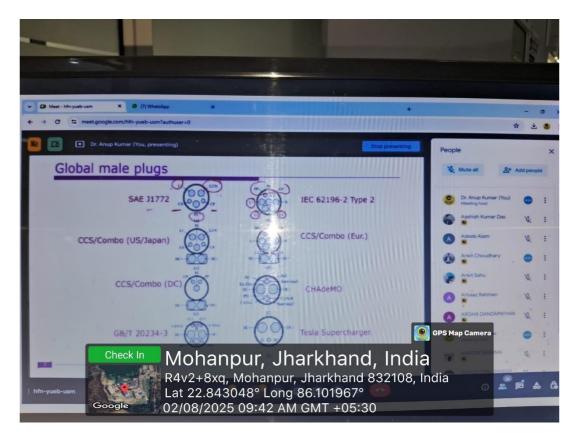
Dr. Ashwini Kumar





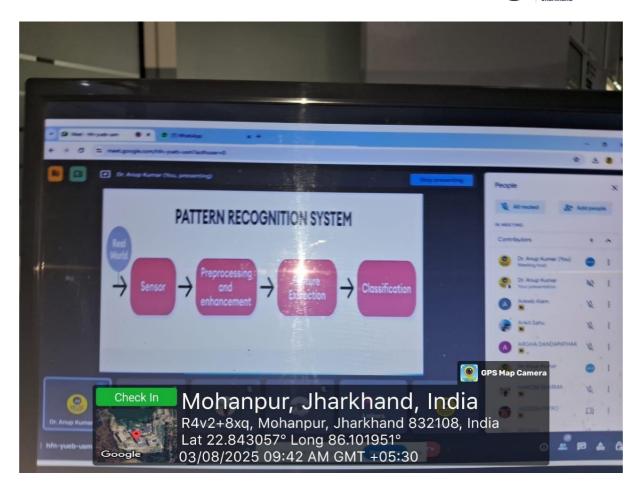
PHOTOS OF THE EVENT

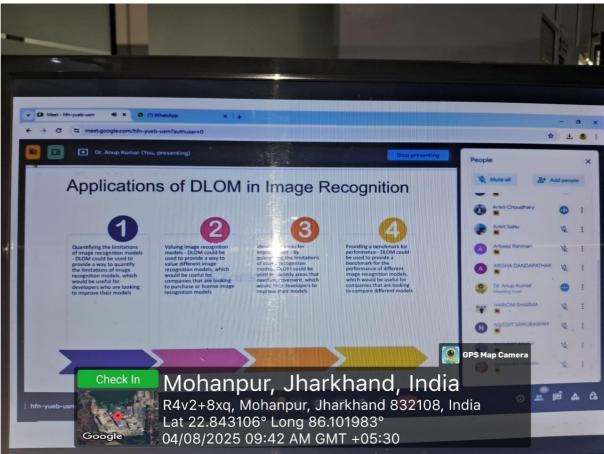










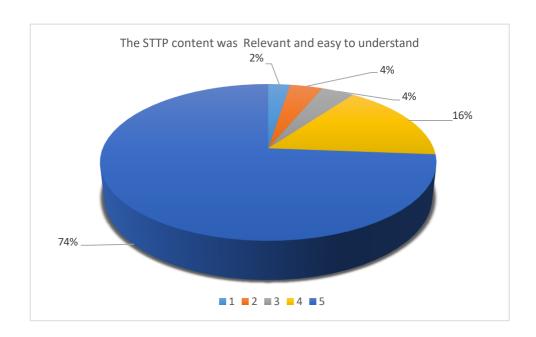






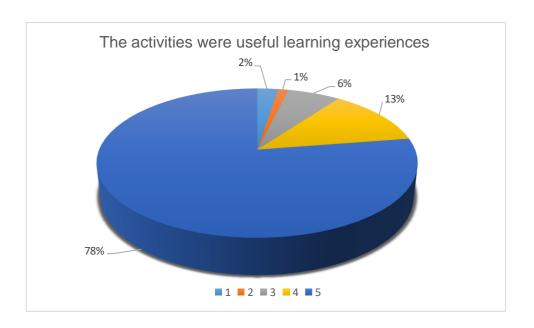
Feedback Analysis

	Student Feedback Analysis						
S.	Degarintien		Ra	Total			
no	Description	1	2	3	4	5	Total
1	The STTP content was Relevant and easy to understand	2	3	3	13	9	30
2	Would you like to attend such kind of Sessions in future	0	1	3	16	10	30
3	The STTP provide useful additional information	2	3	4	19	2	30
4	The activities were useful learning experiences.	2	1	5	10	12	30
5	The facilitators were responsive to participants' questions	2	3	5	14	6	30
6	Would you like to Encourage others to Participate such kind of Sessions	1	1	3	19	6	30
7	How would you like this event	1	3	4	20	2	30









List of Participants Registered

S.n o	Enrollm ent Numbe r	Name	Branch	Cours e	Institute	Semester	Contact Number	Email Address
1	AJU/21 1207	VIKASH KUMAR	Mechanic al Engineeri ng	B .Tech	Arka Jain University	6	8271309381	vikashkumar827130@g mail.com
2	AJU/21 1278	AMAN NANDI	Mechanic al Engineeri ng	B .Tech	Arka Jain University	6	9572306329	aman.nandi2111@gmail. com
3	AJU/21 1626	CHAYAN MUKHERJEE	Mechanic al Engineeri ng	B .Tech	AJU	6	6203094006	chayanmukherjee003@g mail.com
4	AJU/22 2111	VICKY SARDAR	Mechanic al Engineeri ng	B .Tech	ARKA Jain University	4	6201316907	vsardar635@gmail.com
5	AJU/22 2118	AKSHA Y KUMAR	Mechanic al Engineeri ng	B .Tech	Arka Jain	4	9279932923	akshaykumar128816@g mail.com
6	AJU/22 2155	ANKIT KUMAR MISHRA	Mechanic al Engineeri ng	B .Tech	Arka Jain University	4	8789147714	ankitkrmishra.06@gmail. com
7	AJU/22 2265	ANKIT SAHU	Mechanic al Engineeri	B .Tech	Arka jain University	6	7979988765	4245asahu@gmail.com





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8	AJU/22 2013	AMARJEET YADAV	Mechanic al Engineeri ng	В	ARKA JAIN UNIVERSIT Y	4	8789905416	amarjeetyadav5416@gm ail.com
9	AJU/22 2037	BIKES H KUMA R	Mechanic al Engineeri ng	B .Tech	Arka Jain University	4	9304845985	bikeshkumarsingh93048 4@gmail.com
10	AJU/21 0389	MD ARIF RAZA	Mechanic al Engineeri ng	B .Tech	Arka jain Univers ity, Jamshedpur	6	8709648206	arifkhanl500ma@gmail.c om
11	AJU/22 2101	SOURA V KUMAR	Mechanic al Engineeri ng	B .Tech	Arka Jain University	4	9304629416	sk34635574@gmail.com
12	AJU/22 2102	DEEPAK HEMBROM	Mechanic al Engineeri ng	B .Tech	Arka Jain University	4	9771343441	deepakjsr2017@gmail.co m
13	AJU/222 106	PANDA HRUSHIKES H JAGANNATH	Mechanica l Engineerin g	B .Tech	ARKA JAIN UNIVERSITY	4	9172663397	hrushikeshp0013@gmail. com
14	AJU/210 424	SUNKARA TEJASWARA RAO	Mechanica l Engineerin g	B .Tech	Arka Jain University	6	8603914454	rao.jsr01@gmail.com
15	AJU/220 194	ASHISH KUMAR VERMA	Mechanica l Engineerin g	B .Tech	Arka Jain university	4	9128727634	ashishmimicromax@gma il.com
16	AJU/221 849	UTTAM KUMAR	Mechanica l Engineerin g	B .Tech	Arka Jain University	4	7324950015	officialrana07@gmail.co m
17	AJU/211 752	AYUSHMAN	Mechanica l Engineerin g	B .Tech	Arka Jain University	6	9931502435	achal.kumar@tatasteel.co m
18	AJU/211 750	ROHI T GHOS H DASTIDAR	Mechanica l Engineerin g	B .Tech	Arka Jain University	6	7004770112	rohitghosh017@gmail.co m
19	AJU/220 704	PRIYANSHU DALAI	Mechanica l Engineerin g	B .Tech	ARKA JAIN UNIVERSITY	4	7858079266	jsrpriyanshu1@gmail.co m
20	AJU/211 722	ASHISH KUMAR JHA	Mechanica l Engineerin g	B .Tech	Arka jain University	6	9525172035	ashish007821@gmail.co m





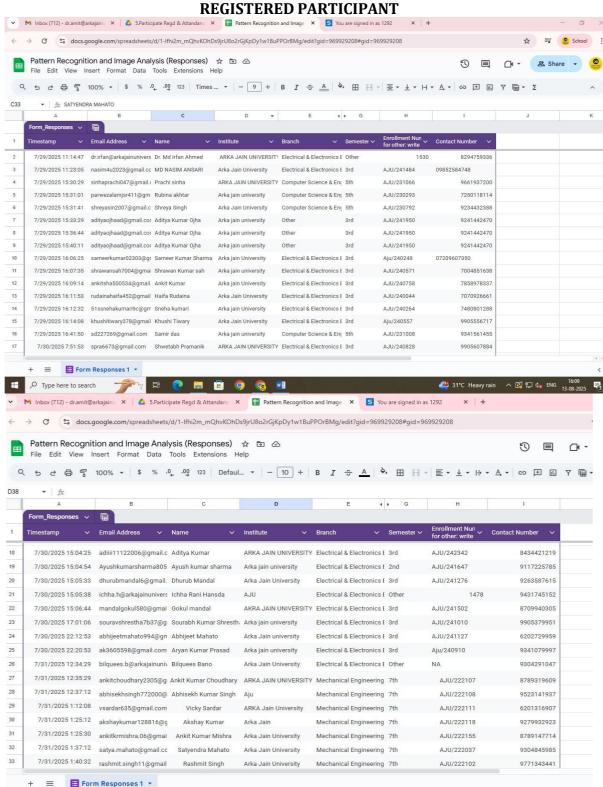
П								
21	AJU/221 528	AASHISH KUMAR DAS	Mechanica l Engineerin g	B .Tech	Arka Jain University	4	9608060095	aashishkumardasbnd200 3@gmail.com
22	AJU/221 679	SAQULAI N HASSA N	Mechanica l Engineerin g	B .Tech	Arka jain university	4	9508852759	saqulainhassan2@gmail.c om
23	AJU/222 110	ADEEB ALAM	Mechanica l	B .Tech	ARKA JAIN UNIVERSITY	4	9508961383	adeebalam699@gmail.co m
24	AJU/211 739	DEEPAK PRASAD MAHATO	Mechanica l Engineerin g	B .Tech	Arka jain university	6	6201045023	deepakjh049@gmail.com
25	AJU/211 745	AJAY MANDAL	Mechanica l Engineerin g	B .Tech	Arka Jain university	6	7970404118	ajaymandal7037@gmail.c om
26	AJU/221 940	AMAAN DANISH KHAN	Mechanica l Engineerin g	B .Tech	Arka jain university	4	8340293898	danishamaan23@gmail.c om
27	AJU/221 981	NITISH PRAJAPATI	Mechanica l Engineerin g	B .Tech	Arka Jain University	4	9142867645	nitishprajapatinp999088 8@gmail.com
28	AJU/211 154	HRITESH KUMAR DEY	Mechanica l Engineerin g	B .Tech	Arka Jain University	6	7209208543	hriteshdey.1207@gmail.c om
29	AJU/222 107	ANKIT KUMAR CHOUDHARY	Mechanica l Engineerin g	B .Tech	ARKA JAIN UNIVERSITY	4	8789319609	ankitchoudhary2305@g mail.com
30	AJU/222 108	ABHISEKH KUMAR SINGH	Mechanica l Engineerin g	B .Tech	Aju	4	9523141937	abhisekhsingh772000@g mail.com
31	AJU/210 455	AYUSH KUMA R SINGH	Mechanica l Engineerin g	B .Tech	Arka jain University jamshedpur	6	9798100200	ayushsinghjsr66@gmail.c om
32	AJU/210 827	ROHIT KUMA R	Mechanica l Engineerin g	B .Tech	ARKA Jain University	6	9861045184	rohitkumar505064@gma il.com
33	AJU/221 137	SURAJ PANDE Y	Mechanica l Engineerin g	B .Tech	Arka Jain University	4	9113790154	surajpandeymmmmm@g mail.com
34	AJU/221 505	DHIJENDRA MAHATO	Mechanica l Engineerin g	B .Tech	Arka Jain University	4	7970635888	sidrick172@gmail.com





35 AJU/211 207	VIKAS H KUMA	Mechanica l B Engineerin	Arka Jain University	6	8271309381	vikashkumar827130@g mail.com
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CIRCULAR

Date: 04/08/2025

Assessment for the Value added course for undergraduate programme –B.Tech All Branches has been scheduled for awarding the certification as follows:

Name of Value Added Course	Pattern Recognition and Image Analysis
Date of Assessment/Examination	12-08-2025
Time schedule	11AM-12 PM
Duration of Examination	1 Hrs

The passing requirement for value added courses shall be 50% of the marks prescribed for the course.

The grades obtained in VACs will not be included for calculating the SGPA/CGPA.

For any query related to Examination as well as course that the students may contact to VAC coordinator.

Alies _

Dr. Ashwini Kumar Asst. Dean ARKA JAIN University, Jharkhand-832108





Attendance

S.no	Enrolment Number	Name	31/07/2025 (Session-I)	31/07/2025 (Session-II)	31/07/2025 (Session-III)	01/08/2025 (Session-I)	01/08/2025 (Session-II)	01/08/2025 (Session-III)	02/08/2025 (Session-I)	02/08/2025 (Session-II)	02/08/2025 (Session-III)	04/08/2025 (Session-I)	04/08/2025 (Session-II)	04/08/2025 (Session-III)	05/08/2025 (Session-I)	05/08/2025 (Session-II)	05/08/2025 (Session-III)	Total no. of classes attended	Total number of classes Conducted	%
1	AJU/241484	MD NASIM ANSARI	A	P	P	P	P	P	Р	A	P	P	P	P	P	P	P	13	15	87
2	AJU/231066	Prachi sinha	Α	P	P	P	P	P	P	P	P	P	P	Α	P	P	Α	12	15	80
3	AJU/230293	Rubina akhtar	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	13	15	87
4	AJU/230792	Shreya Singh	A	P	P	P	P	Α	P	Α	P	P	P	Α	P	P	P	11	15	73
5	AJU/241950	Aditya Kumar Ojha	P	P	P	P	A	P	P	P	Р	A	P	Р	P	A	P	12	15	80
6	AJU/240248	Sameer Kr. Sharma	A	P	P	A	A	A	P	A	A	A	A	A	A	A	A	03	15	20
7	AJU/240571	Shrawan Kumar sah	A	P	P	P	P	A	P	A	P	P	P	A	P	P	P	11	15	73
8	AJU/240758	Ankit Kumar	P	P	P	P	Α	P	P	P	P	Α	P	P	P	Α	P	12	15	80
9	AJU/240044	Haifa Rudaina	P	P	P	A	P	P	P	P	P	A	P	P	A	P	P	12	15	80
10	AJU/240264	Sneha kumari	P	P	Α	P	P	P	P	Α	P	P	P	P	P	P	P	13	15	87
11	AJU/240557	Khushi Tiwary	A	P	P	P	P	P	P	A	P	P	P	P	P	P	P	13	15	87
12	AJU/231008	Samir das	Α	P	P	P	Α	P	P	Α	P	P	P	P	P	P	A	11	15	73
13	AJU/240828	Shwetabh Pramanik	A	P	P	A	P	P	P	P	A	P	P	P	P	P	P	12	15	80
14	AJU/242342	Aditya Kumar	P	P	P	P	Α	P	P	Α	P	P	P	P	P	A	P	12	15	80
15	AJU/241647	Ayush kumar sharma	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	14	15	93
16	AJU/241276	Dhurub Mandal	P	P	P	P	P	P	P	A	A	P	P	A	P	P	P	12	15	80
17	AJU/241478	Ichha Rani Hansda	ı 1	Р	P .	A	P I	PI	PF	РР	P	Α	Р	Р	A	P	P	12	15	80
18	AJU/241502	Gokul mandal]	P	P	P	A I	P	A A	A P	P	P	P	A	P	P	P	11	15	73
19	AJU/241010	Sourabh Kumar Shrestha	1	Р	P .	A 1	P I	P	P A	A P	P	P	P	A	P	P	P	12	15	80
20	AJU/241127	Abhijeet Mahato]	P	A	P	A I	P	PF	P A	P	P	P	A	P	P	P	11	15	73
21	AJU/240910	Aryan Kumar Prasad]	P	P .	A 1	P I	P	P A	A P	P	P	P	P	P	P	P	13	15	87
22	AJU/222037	Satyendra Mahato	1	P	Ρ.	A 1	P A	A I	PF	P	A	. P	P	A	P	P	P	11	15	73





23	AJU/222107	Ankit Kumar Choudhary	P	P	P	A	P	P	P	A	P	P	P	A	P	P	P	12	15	80
24	AJU/222108	Abhisekh Kumar Singh	P	P	P	P	A	A	P	P	P	A	P	P	P	P	A	11	15	73
25	AJU/222111	Vicky Sardar	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	15	15	100
26	AJU/222118	Akshay Kumar	A	P	P	P	P	P	P	A	Α	A	Α	A	Α	Α	A	06	15	40
27	AJU/222155	Ankit Kumar Mishra	A	P	P	P	P	P	P	P	P	P	P	A	P	P	A	12	15	80
28	AJU/222102	Rashmit Singh	P	P	A	P	P	P	P	P	P	P	Α	P	P	P	P	13	15	87
29	AJU/222013	Amarjeet Yadav	A	P	P	P	P	A	P	A	P	P	P	A	P	P	P	11	15	73
30	AJU/222101	Sourav Kumar	P	P	P	P	A	P	P	P	P	A	P	P	P	A	P	12	15	80



Circular

Date: 14-08-2025

This is to notify all the students of B.TECH that the following of them has successfully completed the Value Added course (VAC) on the topic "Pattern Recognition and Image Analysis". The award for the certification is considered after finding that the student has fulfilled the eligible criteria for it.

S.no	Enrolment Number	Name	Marks %
1	AJU/241484	MD NASIM ANSARI	89
2	AJU/231066	Prachi sinha	80
3	AJU/230293	Rubina akhtar	87
4	AJU/230792	Shreya Singh	73
5	AJU/241950	Aditya Kumar Ojha	80
6	AJU/240571	Shrawan Kumar sah	73
7	AJU/240758	Ankit Kumar	73
8	AJU/240044	Haifa Rudaina	80
9	AJU/240264	Sneha kumari	80
10	AJU/240557	Khushi Tiwary	87
11	AJU/231008	Samir das	87
12	AJU/240828	Shwetabh Pramanik	73
13	AJU/242342	Aditya Kumar	67
14	AJU/241647	Ayush kumar sharma	32
15	AJU/241276	Dhurub Mandal	93
16	AJU/241478	Ichha Rani Hansda	80
17	AJU/241502	Gokul mandal	80
18	AJU/241010	Sourabh Kumar Shrestha	73
19	AJU/241127	Abhijeet Mahato	80
20	AJU/240910	Aryan Kumar Prasad	73
21	AJU/222037	Satyendra Mahato	87
22	AJU/222107	Ankit Kumar Choudhary	73
23	AJU/222108	Abhisekh Kumar Singh	80
24	AJU/222111	Vicky Sardar	73
25	AJU/222155	Ankit Kumar Mishra	100
26	AJU/222102	Rashmit Singh	82
27	AJU/222013	Amarjeet Yadav	80
28	AJU/222101	Sourav Kumar	87









All the above mentioned students are hereby intimated to collect their course completion certificate from the Course Coordinator.



Dr. Ashwini Kumar Asst. Dean ARKA JAIN University, Jharkhand-832108

Copy for information & necessary action please: -

- 1. PS to The Vice-Chancellor
- 2. PS to The Director
- 3. PS to The Registrar
- 4. Controller of Examination for information
- 5. In charge Web services for Website
- 6. Notice Board
- 7. Guard File