VIT-AP UNIVERSITY

3rd INTERNATIONAL SUMMER SCHOOL 2026

Theme: **Artificial Intelligence (AI) in Science, Technology, Engineering, Management, Law, Humanities, and Social Sciences**

Learn, Explore, & Immerse in INDIA

31st July - 14th August 2026

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ABOUT VIT-AP

Vellore Institute of Technology (VIT), the parent organization of VIT-AP University, was established in 1984, VIT ranks within the top 501-600 universities worldwide, according to the Shanghai ARWU Ranking 2024. In the QS World University Ranking 2025 VIT ranks 9th India and 150th globally in Engineering and Technology. Moreover, VIT ranks 10th in the University category, 13th in Research, and 11th among Engineering institutions in India, according to the 2024 NIRF Ranking published by the Ministry of Education, Government of India.

Vellore Institute of Technology - Andhra Pradesh (VIT-AP) University, a constituent of VIT, was established in 2017 in Amaravati (near Vijayawada), Andhra Pradesh, offering degree programs at all levels in Engineering, Sciences, Management, Humanities, and Law, with a student enrolment of more than 19000. VIT-AP is a pioneering institute for higher education in the state of Andhra Pradesh. At VIT-AP, we inspire bright young minds from across the country and the world to harness and develop their exceptional intellectual abilities to become socially responsible and skilled individuals.

VIT-AP is spearheaded by Dr. G. Viswanathan, Founder & Chancellor of the VIT group of institutions, along with the core group comprising Vice Presidents Sri. Sankar Viswanathan, Dr. Sekar Viswanathan, Dr. G.V. Selvam, Vice-Chancellor, and Registrar. In tandem with the VIT tradition, the leadership at VIT-AP resonates with a dynamic blend of academic initiative and industry partnership with a vision of creating one of the finest academic destinations in the world.

ABOUT THE PROGRAMME

The International Summer School 2026 at VIT-AP University offers hands-on workshops across multiple disciplines, focusing on AI in Engineering, Technology, and Sciences, aimed at enhancing technical and professional competencies while providing a culturally immersive experience of India.

PROGRAMME HIGHLIGHTS

- Wide AI Spectrum: Generative AI, NLP, Computer Vision & Explainable AI
- Multidisciplinary Applications: Engineering, Healthcare, Finance, Marketing & Sciences
- Industry Focus: Robotics, Smart Manufacturing, Supply Chain & Automation
- Hands-on Sessions: AI tools, case studies, prototyping & live demos
- Emerging Technologies: IoT, No-code AI, and AI-driven research
- Ethics & Society: AI in law, media, and social impact
- Expert Talks: Insights from academicians & industry professionals
- Interactive Learning: Activities, discussions & networking opportunities

Location: **VIT-AP University, Andhra Pradesh, India**
Programme type: **Academic, Cultural Immersion**
Programme date: **31st July - 14th August 2026**
Programme fee: **100 USD**

Programme fee includes:

- ✔ Accommodation (4 Bedded AC Room)
- ✔ Welcome Kit
- ✔ Cultural Activities
- ✔ Breakfast, Meals, Dinner
- ✔ ID Card
- ✔ Field Trips

WHERE ARE WE?

How to reach campus*

Nearest Airport: Vijayawada International Airport (VGA)

- Within 1 to 1.5 hours from Hyderabad, Bangaluru, Chennai
- Within 2 hours from Delhi, Mumbai

Nearest Railway Station: Vijayawada Railway Station (BZA)

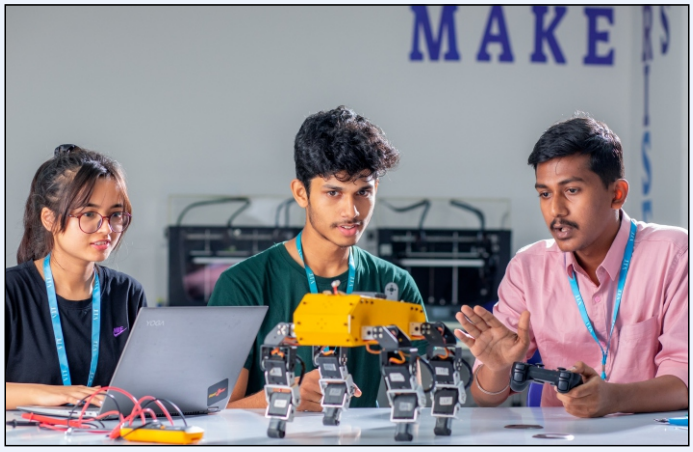
Nearest Bus Station: Pandit Nehru Bus Station, Vijayawada

*Transportation to campus will be arranged from Airport/ Railway Station/ Bus Station

Study tours, Excursions, Workshops

Day	Topic
Day-1 (Friday) 31st July 2026	Arrival/campus activities
Day-2 (Saturday) 1st August 2026	**School of Computer Science and Engineering (SCOPE):** Emerging Trends and Applications in Artificial Intelligence
Day-3 (Sunday) 2nd August 2026	Leisure day/ Vijayawada and Guntur city visit
Day-4 (Monday) 3rd August 2026	**Center of Excellence (CoE):** No-Code AI, Automation, and Real-Time Applications
Day-5 (Tuesday) 4th August 2026	**Engineering Clinics:** IoT Prototyping using Arduino and Raspberry Pi
Day-6 (Wednesday) 5th August 2026	**School of Electronics Engineering (SENSE):** Transforming Electronics through Artificial Intelligence
Day-7 (Thursday) 6th August 2026	**Entrepreneurship Bootcamp:** From Idea to Investor Pitch in One Day using AI
Day-8 (Friday) 7th August 2026	**School of Mechanical Engineering (SMEC):** Applications of AI in Mechanical Engineering Systems
Day-9 (Saturday) 8th August 2026	Industrial visit
Day-10 (Sunday) 9th August 2026	Local tourism
Day-11 (Monday) 10th August 2026	**School of Advanced Sciences (SAS):** Artificial Intelligence in Advanced Sciences
Day-12 (Tuesday) 11th August 2026	**School of Business (VSB):** AI-Driven Business - From Strategy to Execution
Day-13 (Wednesday) 12th August 2026	**School of Social Sciences and Humanities (VISH):** AI in Society & Culture - Exploring Ethics, Identity, and Human Interaction
Day-14 (Thursday) 13th August 2026	**School of Law (VSL):** Law and Artificial Intelligence in the Modern World: Ethics, Advocacy, and Dispute Resolution
Day-15 (Friday) 14th August 2026	Departure from the campus

Campus Highlights



90+ MoUs with Foreign Universities

100+ Student Clubs

Students come from 27 states and 6 Union Territories

19000+ Students across all Programmes and Levels

Students from 10 Countries

24 Hour Accredited Security Team

QS I-GAUGE INDIAN UNIVERSITY RATING GOLD

Ranked #1 in Emerging Private Universities in India (Outlook University Rankings 2022, 2023 & 2024)

Faculty members are in the World's Top 2% Scientists list in Stanford University and Elsevier

Evening Activities

Relax and have fun!

Day-1 (31.07.2026):
Arrival, Registration and Campus Activities

Day-2 (01.08.2026):

School of Computer Science & Engineering

Emerging Trends and Applications in Artificial Intelligence

Highlights:

- Comprehensive AI Coverage: From Generative AI and NLP to Computer Vision and Multimodal AI
- Real-World Applications: Focus on AI in Healthcare and Biomedical Systems
- Emerging Concepts: Introduction to Explainable AI (XAI) for transparent decision-making
- Hands-On Learning: Interactive session with case studies and practical discussions

Time	Topic
10:00 – 10:15 AM	Introduction
10:15 – 11:15 AM	Generative AI and Foundation Models
11:15 – 12:00 PM	Natural Language Processing (NLP)
12:00 – 1:00 PM	Computer Vision & Multimodal AI
1:00 – 2:00 PM	Lunch Break
2:00 – 3:00 PM	AI in Healthcare and Biomedical Systems
3:00 – 3:45 PM	Explainable AI (XAI)
3:45 – 4:00 PM	Tea Break
4:00 – 4:45 PM	Hands-on / Case Studies / Discussion Session
4:45 – 5:00 PM	Q&A and Valedictory Session

Day-3 (02.08.2026):

Leisure day/ Vijayawada and Guntur city visit

Day-4 (03.08.2026):

Centre of Excellence

No-Code AI, Automation, and Real-Time Applications

Highlights:

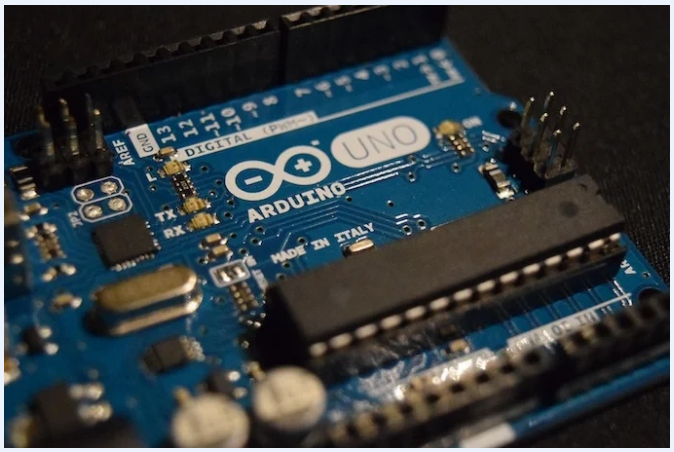
- No-Code AI Development: Learn to build AI applications without coding expertise
- Tool-Focused Learning: Introduction to n8n for workflow automation and AI integration
- Hands-On App Building: Practical session on creating your own AI applications
- Real-Time Exposure: Live demonstration of AI and robotic research at AIR
- Industry-Relevant Skills: Focus on automation, AI tools, and rapid deployment

Time	Topic
10:00 – 10:15 AM	Introduction
10:15 – 11:15 AM	A Session on No-Code Platforms to Build AI Apps
11:15 – 12:00 PM	Introduction to n8n
12:00 – 1:00 PM	Building Your Own AI Apps Using n8n
1:00 – 2:00 PM	Lunch Break
2:00 – 3:30 PM	Real-Time Demonstration of AI & Robotic Research at AIR
3:30 – 3:45 PM	Tea Break
3:45 – 4:45 PM	Hands-on / Interactive Session
4:45 – 5:00 PM	Q&A and Valedictory Session

Day-5 (04.08.2026):

Engineering Clinics

IoT Prototyping using Arduino and Raspberry Pi



Highlights:

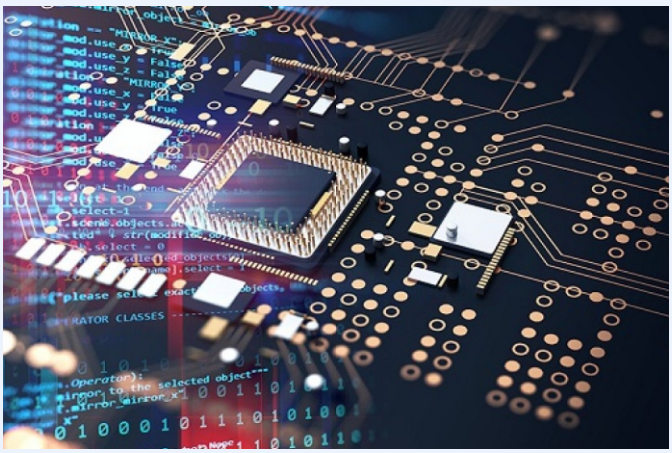
- Hands-On Prototyping: Build real projects using Arduino and Raspberry Pi
- IoT & Automation Focus: Design smart systems with sensors and actuators
- Dual Programming Skills: Work with C++ (Arduino) and Python (Raspberry Pi)
- Hardware–Software Integration: Learn to connect electronics with code
- Practical Learning Approach: Mini-projects and real-time implementation
- Skill Development: Enhance creativity and problem-solving abilities
- Industry-Relevant Exposure: Foundation in embedded systems and IoT applications

Time	Topic
10:00 – 10:45 AM	**Arduino:** Introduction to Microcontrollers, the Arduino Ecosystem, IDE setup, and Basic Electronics (breadboards, LEDs)
10:45 – 11:45 AM	**Arduino:** Digital and Analog I/O: Reading basic sensors (push buttons, potentiometers, LDRs) and controlling output devices
11:45 AM – 1:00 PM	**Arduino Mini -Project:** Building a standalone sensor-based automated system (e.g., smart lighting or obstacle avoidance)
1:00 – 2:00 PM	Lunch Break
2:00 – 3:00 PM	**Raspberry Pi :** Introduction to Single -Board Computers, Raspberry Pi OS, and basic Python programming for GPIO pins
3:00 – 4:00 PM	**Raspberry Pi :** Advanced Interfacing: Connecting environmental sensors (e.g., Temperature/Humidity, Ultrasonic) and reading data using Python
4:00 – 5:00 PM	**Raspberry Pi :** Intro to IoT/Basic AI Integration & Mini-Project: Utilizing sensor data for real -time decision-making. Q&A and wrap-up

Day-6 (05.08.2026):

School of Electronics Engineering

Transforming Electronics through Artificial Intelligence



Highlights:

- AI in Electronics Focus: Comprehensive introduction to integrating AI in electronic systems
- Concept to Application: Covers fundamentals, benefits, and real-world use cases of AI
- Emerging Technologies: Insights into AI-driven smart electronic devices
- Hands-On Learning: Practical session on AI/ML for signal processing
- Research Exposure: Showcase of school outputs, publications, and best practices
- Expert-Led Sessions: Structured learning from theory to application

Time	Topic
10:00– 10.30 AM	Welcome Address & Introduction of School
10.30– 12.00 PM	Introduction of AI in Electronics
12.00– 13:00 PM	Benefits and practical use of AI
14.00 – 14.30 PM	Integrating AI in Electronics devices
14.30– 16:30 PM	AI/ML for signal processing - Hands-on
16.30– 16:40 PM	Share School output/publications on AI and best practice
16.45– 17:00 PM	Valedictory Session

Day-7 (06.08.2026):

Entrepreneurship Bootcamp

From Idea to Investor Pitch in One Day using AI

Highlights:

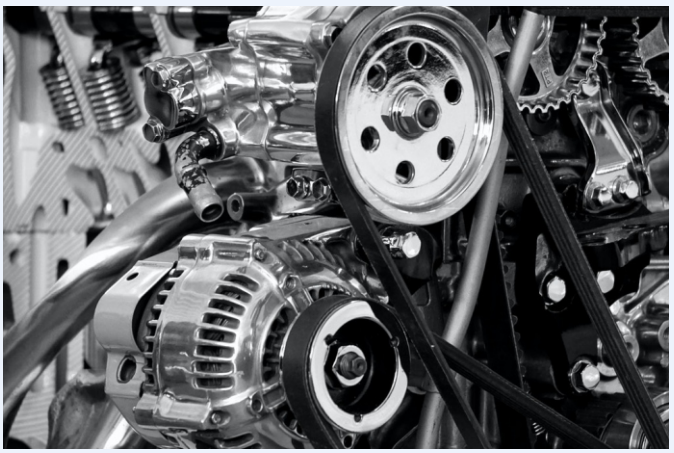
- AI-Assisted Ideation: Identify problems and generate innovative solutions using AI tools
- Hands-On Startup Development: Define user personas, problem statements, and solution pathways
- Rapid Prototyping: Build MVP concepts and validate ideas efficiently
- Lean Startup Approach: Learn and apply the Lean Canvas model for business planning
- Pitch Deck Preparation: Develop investor-ready presentations
- Real-Time Pitching: Present ideas and receive constructive expert feedback
- End-to-End Startup Experience: From ideation to validation and final pitch in one day

Time	Topic
10:00– 11:30 AM	**Problem Identification & AI-Assisted Ideation** Hands-on: Define user persona, problem statement, and solution directions
11.30 – 12.00 PM	**AI-Driven Rapid Prototyping & Validation** Hands-on: Develop MVP concept, basic prototype, and validation hypothesis
13.00– 14:00 PM	**Lunch Break**
14.00 – 15.30 PM	**Pitch Deck Preparation** Hands-on: Lean Canvas Model
15.30– 17:00 PM	**Pitch Presentation & Feedback** Activity: Team presentations followed by expert feedback

Day-8 (07.08.2026):

School of Mechanical Engineering

Applications of AI in Mechanical Engineering Systems

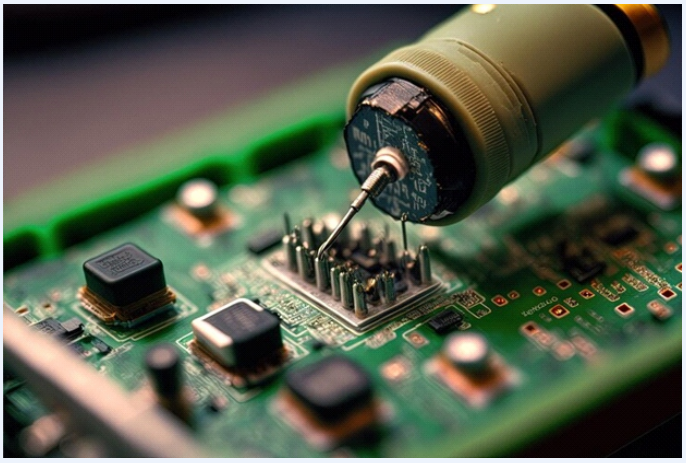


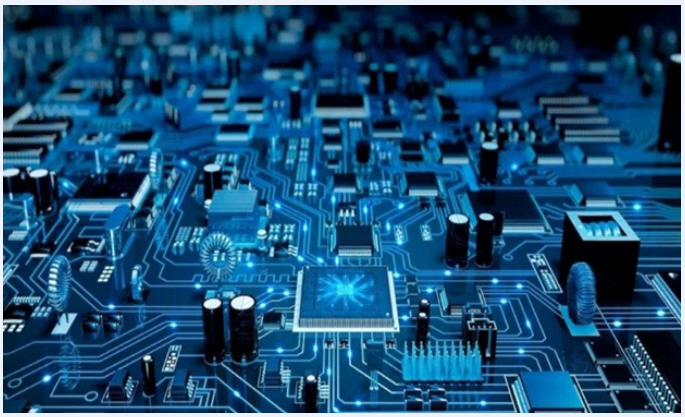
Highlights:

- Industry-Focused AI Applications: Explore AI in robotics, manufacturing, and thermo-fluid systems
- AI in Robotics: Learn how AI enables autonomous, adaptive, and collaborative robotic systems
- Advanced Manufacturing: Discover AI-driven productivity, quality improvement, and predictive maintenance
- Thermo-Fluid Intelligence: Apply AI for thermal system design, energy efficiency, and optimization
- Real-World Relevance: Focus on industrial applications and next-generation technologies
- Comprehensive Learning: Covers multiple core mechanical engineering domains in one day

Time	Topic
10.00 AM - 10.30 AM	Ice Breaking Session: Welcome Address & Program Overview
10.30 AM - 1.00 PM	AI in Industrial Robotics: Expert lecture on the impact of AI in Robot applications, shifting robots from fixed, pre-programmed tasks to autonomous, adaptive, and intelligent agents, human-robot collaboration.
1.00 - 2.00 PM	Lunch
2.00 - 3.30 PM	AI in Advanced Manufacturing: Use of Artificial Intelligence in advanced manufacturing to enhance productivity, quality, and efficiency. Integrating AI to automate complex processes, predict maintenance needs and generative design for product development.
3.30 - 5.00 PM	AI in Thermo-fluid Computational applications: Use of AI for enhancing design, modelling, and control of thermal systems. Development of data-driven models for energy efficiency in HVAC, optimization of thermal energy storage, predictive maintenance in heat transfer applications.

Day-9 (08.08.2026):
Industrial Visit





Day-10 (09.08.2026):
Local Tourism

Explore@Amaravati

Andhra Pradesh is one of the safest places in India
Beautiful surroundings within
Amaravati and its countryside
20 km to Vijayawada city by road

Prakasam Barrage

Undavalli Caves

Bhavani Island

Dhyana Buddha Statue

Adventura

Kondapalli Fort

Day-11 (10.08.2026):

School of Advanced Sciences

Artificial Intelligence in Advanced Sciences

Highlights:

- AI for Scientific Discovery: Explore how AI accelerates advanced research across disciplines
- Interdisciplinary Learning: Applications in Physics, Chemistry, Mathematics, and Energy Materials
- Modeling & Simulation: Use of machine learning for scientific modeling and data analysis
- Materials & Molecular Design: AI-driven approaches in chemistry and materials science
- Energy & Electrochemistry Focus: Insights into AI applications for energy materials
- Hands-On Experience: Practical session on AI tools for scientific data analysis
- Research-Oriented Approach: Emphasis on real-world scientific and engineering challenges

Time	Topic
10:00 – 10:15 AM	Inauguration & Introduction
10:15 – 11:15 AM	AI for Scientific Discovery and Advanced Research
11:15 – 12:00 PM	Machine Learning in Physics: Modelling & Simulation
12:00 – 1:00 PM	AI Applications in Chemistry: Materials & Molecular Design
1:00 – 2:00 PM	Lunch Break
2:00 – 3:00 PM	AI in Mathematics: Modelling, Optimization & Data-Driven Methods
3:00 – 3:45 PM	AI in Energy Materials & Electrochemistry
3:45 – 4:00 PM	Tea Break
4:00 – 4:45 PM	Hands-on Session: AI Tools for Scientific Data Analysis
4:45 – 5:00 PM	Q&A and Valedictory Session

Day-12 (11.08.2026):

School of Business

AI-Driven Business - From Strategy to Execution

Highlights:

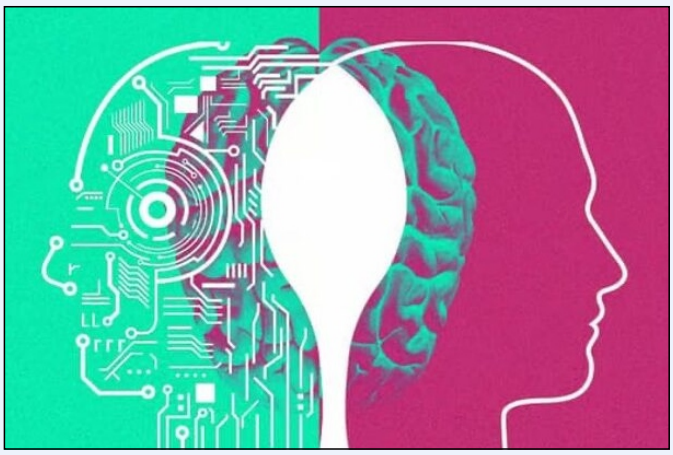
- Interactive Ice-Breaking: Engaging introduction through fun activities and games
- AI in Marketing & Retail: Learn how AI enables personalization, customer insights, and smarter branding strategies
- AI in Finance: Explore automation, risk analysis, fraud detection, and data-driven financial decisions
- AI in Supply Chain & Logistics: Understand AI-driven planning, routing, and operational efficiency
- Business-Focused AI Applications: Practical insights across core management domains
- Holistic Learning Experience: Covers multiple business functions in a single day

Time	Topic
10.00 AM - 10.30 AM	Unique Introduction of participants with Games
10.30 AM - 1.00 PM	AI in Marketing, Branding and Retail: An engaging session on the impact of AI in transforming marketing, branding, and retail through personalization, customer insights, and smarter decision-making.
1.00 PM - 2.00 PM	Lunch
2.00 PM - 3.30 PM	AI in Finance: Use of AI in transforming finance through automation, risk analysis, fraud detection, and data-driven decision-making.
3.45 PM - 5.00 PM	AI in Supply Chain and Logistics: AI on supply chain and logistics, focusing on smarter planning, efficient routing, and automated operations

Day-13 (12.08.2026):

School of Social Sciences and Humanities

AI in Society & Culture - Exploring Ethics, Identity, and Human Interaction



Highlights:

- Interactive Icebreaker: "AI or Human?" activity using text and images
- AI in Society: Explore who creates AI, who benefits, and issues of inclusion
- Everyday AI Awareness: Map AI usage across education, media, and communication
- AI, Culture & Bias: Analyze AI outputs for bias and improve prompt design
- Ethics & Media Literacy: Hands-on case studies on privacy, misinformation, and deepfakes
- Language & Identity: Compare AI vs human expression in tone, translation, and style
- Creative Engagement: Group activities like skits, posters, and campaigns on AI & society
- Cultural Integration: Performances and storytelling connecting AI with culture

Time	Topic
10:00 – 10:30 AM	Welcome & Icebreaker: "AI or Human?" Activity
10:30 – 11:15 AM	AI in Social Context
11:15 – 12:00 PM	AI in Daily Life
12:00 – 1:00 PM	AI, Culture & Representation
2:00 – 3:15 PM	AI, Ethics & Media Literacy
3:15 – 4:00 PM	AI, Language & Identity
4:00 – 4:45 PM	Creative Group Activity on AI & Society
4:45 – 5:00 PM	Cultural Programme & Closing Session

Day-14 (13.08.2026):

School of Law

Law and Artificial Intelligence in the Modern World: Ethics, Advocacy, and Dispute Resolution

Highlights:

- AI & Law Integration: Explore the intersection of Artificial Intelligence with legal systems
- Ethical AI Perspectives: Insights into responsible and ethical use of AI in the modern world
- Legal Applications of AI: Understanding AI's role in law, policy, and governance
- Courtroom Innovation: AI in advocacy and modern legal practice
- Experiential Learning: ADR briefing and mock trial for practical exposure
- Expert-Led Sessions: Talks delivered by distinguished faculty members
- Cultural Engagement: "Ethnic India" cultural event showcasing diversity
- Holistic Experience: Blend of academic learning, practical training, and cultural activities

Time	Topic
10:00 – 10:15 AM	Welcome Address & Program Overview
10:15 – 11:15 AM	Ethical Use of AI in the Modern World
11:15 AM – 12:15 PM	Law and AI in the Modern World
12:15 – 1:00 PM	Role of AI in Courtroom Advocacy
1:00 – 2:00 PM	Lunch Break
2:00 – 3:30 PM	ADR Briefing & Mock Trial
3:30 – 4:45 PM	Cultural Event: Ethnic India
4:45 – 5:00 PM	Valedictory Session

Day-15 (14.08.2026):

Departure from the campus