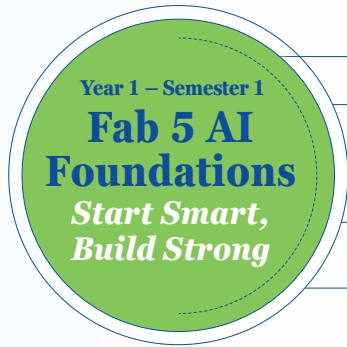


SCHOOL OF AI & FUTURE TECHNOLOGIES

B.Tech Computer Science in AI & ML



- Fundamentals of AI
- AI Ethics and Governance
- AI Programming with Python
- AI Tools & Prompt Engineering
- Entrepreneurial with AI

Year 1 – Semester 1

- Internet of Things / Chemistry
- Statistics & Probability
- Basics of Electrical Engineering Lab
- Problem Solving and Programming Lab
- Fundamentals of Computer Science
- Personality development & effective communication
- SMART Project + LDP
- IT Workshop
- Indian Constitution

Year 1 - Semester 2

- Introduction to SDG, Innovation & Entrepreneurship
- Mathematical Concepts for AI
- Database Management System with NoSQL
- Full Stack (HTML, CSS, JavaScript, Basic Python) Lab
- Environmental Science
- Applied Mathematics – I
- Engineering Physics Lab
- EDx Course / NPTEL

Exit Option to Qualify Certification

- Basics of 3D printing
- Digital Marketing

Students scoring 3 or higher on the AP Computer Science A exam are eligible for 3 credits toward the B.Tech in Computer Science (AI & ML) program at Universal Ai University.

Note: The final courses which will be delivered will be approved by the BoS.

Year 2 – Semester 3

- Foundations of Data Science, AI & ML Lab
- Applied Mathematics – II
- Discrete Mathematics
- Design Thinking and Innovation idea lab
- Data Structures Lab
- Universal Human Values
- Advanced Python Programming Lab

Year 2 – Semester 4

- Advanced Data Science, AI & ML Lab
- Data Integration and Processing
- Theory of Computation
- Computer Networks Lab
- Java Programming
- Mini Project I
- EDx Course / NPTEL
- Summer Internship Program 1 (SIP 1)

Elective – I

- Statistical simulation and data analysis using R
- Data Visualization
- Software Engineering

Exit Option to Qualify Diploma

- Advanced Web Technology
- Home Appliances of IoT

Year 3 – Semester 5

- Natural Language Processing Lab
- AR & VR Applications in Industry Lab
- Time Series Modelling and Forecasting
- Deep Learning (Neural Network) Software Project Management
- Mini Project-II
- AI for Sustainability & Ethics
- EDx Course / NPTEL

Year 3 – Semester 6

- Summer Internship Program 2 (SIP 2)
- Advanced Deep Learning Lab
- Pattern Recognition

Exit Option to Qualify B.Voc

- AI in Agriculture
- Ethical Hacking

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Note: The final courses which will be delivered will be approved by the School of Management UG BoS 2025.

Year 4 – Semester 7

- Human-Machine Interaction
- Soft Computing Lab
- Bioinformatics
- Gen AI and Its Applications
- Cloud Computing for AI/ML Lab
- Project – Phase 1

Year 4 – Elective – II

- Android Programming
- Blockchain technology
- Cyber security
- Quantum Computing

Year 4 – Semester 8

- On-the-Job Training (OJT)
- Project – Phase 2

Elective-III (Swayam- NPTEL)

- Digital Forensic
- Optimization Techniques
- Mobile Computing
- Management /Finance/Language course etc....