लुम्बिनी प्राविधिक विश्वविद्यालय

LUMBINI TECHNOLOGICAL UNIVERSITY

Estd. 2022

Institute of Engineering and Information Technology

Nepalgunj, Banke, Lumbini Province

Academic Year 2023/24

- **B.Tech. in CS & AI**
  Computer Science and Artificial Intelligence
  (4 years)
- **B.Tech. in IT**
  Information Technology
  (4 years)

Intake: 48 students per program (max. 24 in a classroom)

- Scholarships for Disadvantaged Groups | Merit-based Fee Subsidy and Stipends
- Quota for Women, Disadvantaged Groups, Sponsored and Foreign Students
- Fee categories: Nominal, Full Fee, Sponsored, and Foreign Student

About Us

Lumbini Technological University was established on July 2, 2022 (Ashar 18, 2079 BS) by the Act of Province Legislature with the goal of advancing higher education in the field of information technology, engineering, agricultural and forestry, and tourism, among others, with a particular focus on the application and development of technology and innovation. Technology continues to play an increasingly significant role in shaping our world with traditional jobs being replaced by tech-oriented ones, which demands competent professionals.

LTU's mission is to promote and offer comprehensive programs at undergraduate and graduate levels that produce graduates who have both disciplinary expertise and the ability to handle real-world problems by combining theoretical knowledge with practical application along with exposure visits to reputed technological institutions.

LTU recognizes that academic programs are not the only way to foster a rich learning experience. To this end, it also places a strong emphasis on research and continuous education programs by supporting and encouraging students and faculty to engage in rigorous research activities, thus fostering a culture of innovation and creativity that benefits both students and faculty alike.

"If we teach today as we taught yesterday, we rob our children of tomorrow."

— John Dewey

Course Structure of B. Tech in CS and AI

Semester I

- Physics for Computing
- Introduction to Computational Thinking and C Programming
- Mathematics I
- Communication Skills
- Society, Cyber Law and Ethics

Semester II

- Mathematics II
- OOP in Java
- Statistics
- Digital Logic
- Web Technology

Semester III

- Microprocessor and Computer Architecture
- Database Management System
- Data Structure and Algorithm
- Data Communication and Networks
- Discrete Mathematics
- Programming using Python

Semester IV

- Theory of Computation
- Numerical Methods
- Computer Graphics and Multimedia
- Applied Operating System
- Design and Analysis of Algorithm
- Optimization Theory

Semester V

- UI/UX
- Computer Organization and Architecture
- Artificial Intelligence
- Data Science
- Research Methodology
- Project I

Semester VI

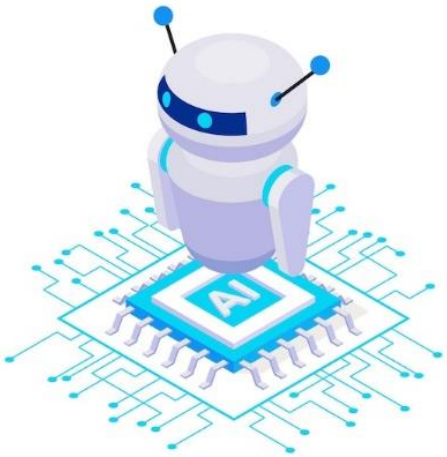
- Software Engineering
- Cloud Computing
- Machine Learning
- Elective I
- Project II

Semester VII

- Software Project Management
- Network Security and Cryptography
- Game Theory
- Blockchain Technology
- Elective II

Semester VIII

- IT Entrepreneurship
- Elective III
- Internship/Capstone Project



Course Structure of B. Tech in IT

Semester I

- Fundamentals of Information Technology
- Introduction to Computational Thinking and C Programming
- Mathematics I
- Communication Skills
- Society, Cyber Law and Ethics

Semester II

- Mathematics II
- OOP in Java
- Statistics
- Digital Logic
- Web Technology

Semester III

- Microprocessor and Computer Architecture
- Database Management System
- Data Structure and Algorithm
- Data Communication and Networks
- Programming using Python

Semester IV

- System Analysis and Design
- Mobile Application Development
- Computer Graphics and Multimedia
- Applied Operating System
- Design and Analysis of Algorithm
- Internet of Things

Semester V

- UI/UX
- Digital Marketing
- Artificial Intelligence
- Data Science
- Research Methodology
- Project I

Semester VI

- Software Engineering
- Cloud Computing
- Data Warehousing and Data Mining
- Elective I
- Project II

Semester VII

- Software Project Management
- Information Security
- Digital Governance
- Blockchain Technology
- Elective II

Semester VIII

- IT Entrepreneurship
- Elective III
- Internship/Capstone Project

Electives

Track 1: Networking and Cyber Security	Track 2: AI, Data Science and Machine Learning
• Network Programming • Net centric computing • Security Audit • Cyber Forensics • Advanced Networking with IPV6 • Routing and Switching Essentials • Network Operating System • Client Server Networking • Network and System Administration • Ethical Hacking • Distributed Networking • Data Center Design and Management • Server Administration	• Image Processing and Pattern Recognition • Computer Vision • Neural Networks and Deep Learning • Natural Language Processing • Reinforcement Learning • Bioinformatics • Big Data Analytics • Data Visualization • Social Media Mining • Deep Learning • GIS • Remote Sensing
Track 3: Application Development	**Track 4: AI and IOT**
• Mobile Application Development • Design Patterns • Client Server system • Net Centric Computing • Server-Side Web Development • Network Programming • Software Quality management • Advanced Web Development • Virtual Reality and 3D games • Concurrent Programming • Advanced Java Programming • Object Oriented Analysis and Design • XML: Foundation Technique & Applications • IT and System Management • Business Design and Innovation Management	• Edge computing for IOT • IOT security • Ethical and Social Implications of AI and IOT • Image Processing and Pattern Recognition • Computer Vision • Neural Networks and Deep Learning • Natural Language Processing • Reinforcement Learning • GIS • Remote Sensing

Eligibility Criteria for Admission

- **For B.Tech. In CS & AI:** Candidates must have passed Class 12 from NEB or equivalent with minimum C Grade / Second Division (Grade D in case of A-level) with Physics, Chemistry and Mathematics.
- **For B.Tech. in IT:** Candidates must have passed Class 12 from NEB or equivalent with minimum D+ Grade / Second Division (Grade D in case of A-level).
- Candidates must pass **Lumbini Technological University Entrance Test** for enrolment.
- Candidates who have passed all subjects of Class 11 and are waiting for the results of Class 12 are also eligible for the entrance examination; however, they must provide Class 12 passing certificate/marksheet during admission.

Program Fee (NPR) for Academic Year 2023/24

Program	Nominal Fee	Full Fee	Sponsored Student	Foreign Student
B.Tech. in CS & AI	129,500	517,500	620,500	715,700
B.Tech. in IT	115,000	460,000	552,000	633,200

Note: Deposits should be paid separately.

Scholarships

Category	Percent of total no. of students admitted
Lumbini Province Chief Minister Scholarship (Full Scholarship for Disadvantaged Groups)	12.5%
Nominal Fee (25% of full fee)	25%
Merit Based Stipend (Semester-wise)	8.3%

Admission Information for 2023/24 (2080/81 BS)

Application Submission Period:

2080/05/06 to 2080/06/05 (Aug. 23, 2023 to Sep. 22, 2023)

Application Fee: NPR 1500

Late Application Submission Period:

2080/06/06 to 2080/06/12 (Sep. 23, 2023 to Sep. 29, 2023)

Application Fee: NPR 2500

Payment Methods:

Application Fee can be deposited online via Fonepay or Khalti during the form filling process, or deposit in the following bank account number (Deposit voucher should be uploaded).

Account Name: Lumbini Technological University

Account Number: 01401017502008

Bank Name/ Branch: Nabil Bank, Nepalgunj Branch

Date of Entrance:

For B.Tech. in CS & AI: 2080/06/17 (Oct. 4, 2023) Time: 9:00 AM

For B.Tech. in IT: 2080/06/17 (Oct. 4, 2023) Time: 2:00 PM

Exam Center: Lumbini Technological University Central office, Nepalgunj, Banke.

The Entrance Examination Application form is available online at **www.entrance.ltu.edu.np**.