



BE COMPUTER BE ELECTRONICS & COMMUNICATION

Kathford Programs

BBA | BSc.CSIT | BE Civil
BE Computer, BE Electronics & Communication



BACHELOR IN COMPUTER ENGINEERING (BE COMPUTER)

About Us

Kathford International College of Engineering and Management (KICEM) is a highly-ranked college dedicated to inspiring teaching, excellent student experience and strong employability. Established in 2003 and affiliated to Tribhuvan University, Kathford offers diverse programs in Engineering, Business, Computer Science and IT. A home to over 1000 students, Kathford has been producing highly competitive graduates and scholars since its inception.

Kathford is founded with the vision to become a leading education hub that provides transformative education for the students stimulating their curiosity and enabling them to turn their aspiration into a lasting basis for success, social impact and continuous learning. The college offers a unique combination of student-centered pedagogy in conjunction with laboratory, field, project and research works. In addition, the college ensures that students have competitive edge and the entrepreneurship skills as they gain access to practical exposure throughout the entire course cycle. This combination of benefits is recognized as The Kathford Advantage.

The Kathford Advantage:

- FAIR (foundation, application, integration and reinforcement) model of pedagogy – a holistic approach to build knowledge and skills;
- Teaching-learning, and structural assessment and feedback of student under the knowledge, application and synthesis/analysis skill (KAS) learning outcome;

- Merit based Kathford scholarships;
- Tuition fee waivers for top ranked students;
- Internship programs for more practical learning;
- Fourteen years of academic excellence in affiliation with the world renowned, largest and oldest university of Nepal (TU);
- Research activities integrated in the course;
- Extra tutorial classes for needy students;
- Competent, committed, and experienced faculties;
- Strong alumni network and employer connections for better job opportunities;
- Career assistance programs for better job prospects.

Kathford Quick Facts

- Founded in 2003 AD;
- Affiliated to Tribhuvan University, Nepal;
- 3 faculties- Engineering, Management and Computer Science and IT;
- 5 Academic degrees;
- 1000+ Undergraduates students;
- 10 batches of BBA graduates;
- 7 batches of Engineering graduates;
- 6 batches of Computer Science and IT graduates;
- Located at Balkumari, Lalitpur with easy access from Kathamandu, Lalitpur and Bhaktapur – A perfect balance between location and serious academic atmosphere.

The BE Computer is a four-year, eight-semester program with 52 foundation, core and elective subjects which is aimed to provide solid foundation on pure science, computing and mathematics, and build the strong competencies on design and implementation of computer-based systems, understanding of the hardware, software and engineering systems involved.

Core Courses

- Computer Programming
- Computer Organization and Architecture
- Operating System
- Computer Networks
- Software Engineering
- Simulation and Modeling
- Database Management System
- Computer Graphics
- Artificial Intelligence

Elective Courses

- Big data Technologies
- Agile Software Development
- Data Mining
- Image processing and Application
- Advanced Java Programming
- XML: Foundations Techniques and Applications
- Networking with IPV6
- Multimedia System

BE Computer Career Prospects

Computing jobs are among the highest paid and have the highest job satisfaction. Our Computer Engineering degree will provide you with skills that are in high demand within industry. Our graduates are working in many software development companies in Nepal and abroad and are providing noble computing solutions ranging from ecommerce to top-class software development.

With a Computer Engineering degree, you can become Software Developer, System Analyst, Web Developer, Application Developer, Network Administrator, Database Manager, Quality Analyst, Solution Architect, Project Manager and Software Entrepreneur in a number of IT companies in Nepal and abroad. Many of our graduates have pursued higher studies in Computer Science and Engineering for better career growth.



OUR STUDENTS' ACHIEVEMENTS

Winner at Software Competition in HEx 2017

Roshan Kumar Dhobi, Manzeal Shakya, Aasis Shakya and Rohini Dangol - students of 4th Year in Computer Engineering at Kathford International College, have emerged Winner in the Software Competition in Himalaya Exhibition (Hex 2017) with their app - Zapp Food. In the same competition, the Second Position was also secured by Kathford's team comprising Dilip Thakur, Vishwas Wagle, Younes KC (4th Year BCT) and Santosh Adhikari (3rd Year BEx) with their app - Automatic Number Plate Recognition System.



BACHELOR IN ELECTRONICS AND COMMUNICATION ENGINEERING (BE ELX & COMM)

The BE Electronics & Communication is a four-year, eight-semester program with 52 foundation, core and elective subjects which helps the graduates to analyze and design complex electronics and communication systems. Electronics and Communication Engineering course at Kathford is carefully designed to develop problem solving skills and in-depth knowledge in telecommunication, digitization and signal processing.

Our Electronics and Communication Engineering degree offers our students a challenging, enriching and rewarding experience that prepares them for the competitive world of electronics and communication.

Core Courses

- Propagation and Antenna
- Telecommunications
- Digital Signal Processing
- Signal Analysis
- Communication System
- Filter Design
- Electromagnetic
- Micro-processor
- Embedded system

BE Electronics and Communication Engineering Career Prospects

With the rapid expansion of the technology sector over the last few decades, the demand for those who can create, understand and alter electronic control systems has risen accordingly. Our graduates have been a part of national and global revolution in electronics, telecommunication and technology, with many of them occupying key positions in the telecom industry in Nepal. Robotics is another sector where Kathford students have made their mark. Robotics Association of Nepal was established by Kathford graduate – Sunoj Das Shrestha. With Electronics and Communication Engineering degree, you can easily get jobs in different telecommunication and IT industries. Besides, Electronics Engineers are highly sought after by many other sectors like hydropower, transport, construction, security, digital system, electronics goods manufacturers etc. Many Electronics Engineers graduated from Kathford have been accepted by top universities around the world for higher education.

Elective Courses

- Optical Fiber Communication
- Satellite Communication System
- Radar Technology
- Biomedical Instrumentation
- Aeronautical Communication
- Broadcasting Engineering
- Remote Sensing
- Multimedia System



OUR STUDENTS' ACHIEVEMENTS

Winner at Automatic Akhada in TechBihani 3.0

Saman Ratna Bajracharya, Rachita Maharjan, Prem Darai and Nabit Dutt Bhatta - students of 1st Year in Electronics and Communication Engineering at Kathford International College, have won Automatic Akhada (robotics competition) in TechBihani 3.0. The robot developed by the students of Kathford was able to push the competitor beyond the boundary to win the final competition. This is a major achievement for young students and an example of Kathford's teaching excellence in Electronics and Communication Engineering.



Teaching and Learning

Top-Class Faculty Members

Kathford boasts of best academics and professionals leading the program. Our students have pride in their faculty members, who have spent decades in university, research, and consultancy. They bring experiences and new found knowledge into the classroom.

Research and Project Work

Kathford conducts research and project work as an integral part of the study. These activities are supervised by the faculty and are designed to help students deepen their knowledge in a particular area of interest.

Workshop and Seminar

Kathford hosts a range of workshops and seminars on varied areas of ICT and software. The workshops and seminars bring together our students and faculties with the domain of specialists from academia, research, ICT industry, and software industries.

Guest Lecture/Speakers

Kathford invites eminent academicians, professionals and experts in specialized area of software industry and ICT industry as guest speakers. These speakers share their ideas, views, knowledge and experiences with faculties and students.

Tutorial Classes

Kathford offers tutorial classes in selected subjects for the needy students. Purpose of these tutorial classes is to support students to achieve subject knowledge and skills to meet the curriculum objectives.

Research and Development (R&D)

The R&D Unit comprises of a panel of Kathford faculty members. This unit consists of ROBOKATH, KATHFOSS and Kathford-Xilinx University Program (Kathford-XUP Center). They bring students, faculty members and experts together to design different projects, research on latest technologies, and transform ideas into implementation.

ROBOKATH

RoboKath is the Robotics Research and Development body of Kathford that indulges and engages students into robotics research, design and development. It conducts different trainings and workshops through industry experts. RoboKath has become a decorated platform for students to share and enhance their knowledge and skill, and to design machines that can create wonders.

RoboKath conducts a number of trainings like basic electronics & robotics training; line tracking robot design training; Arduino and AVR (ATMEGA-32) Microcontroller training; PCB simulation, designing and fabrication training; and drone development training.

KATHFOSS

KathFOSS is Free and Open-Source Software community of Kathford that indulges and engages students into open source software research and development. It organizes different training and workshop for students to enhance programming skills. KathFOSS conducts a number of training and workshops like KathFOSS Talk series, Linux Talk series, GitHub Workshop, Wireless Hacking Workshop, Cyber Security Workshop, Open Source Technology Training, Hackathon and Coding Competition.

Kathford-XUP Center

Kathford-XUP Center is a research center developed in association with Digitronix Nepal, and has obtained 25 number of VIVADO license and other ISE licenses in order to conduct FPGA based Research and Development in Nepal.

Kathford-Guardian Relationship

Kathford organizes regular meeting with parents/guardians of the students to develop functional coordination among students, parents/guardians and faculties to enhance students' academic progress.

Evaluation and Grading

Kathford conducts internal assessment of students in accordance with the KAS learning outcome. Here, students are assessed on their functional knowledge and skills articulated by the curriculum from a range of methods including written test, business case analysis, group discussion, and reports. The overall academic performance of students is evaluated through the mid-semester, end-semester, and University examination.

Facilities

Kathford offers rich academic experiences, new relationships, and diverse cultural values. It motivates students to participate in various activities and benefit from highest quality of campus life.

Library

Library at Kathford is a well-managed and fully equipped learning station for students and faculty member. Kathford has a spacious library with tens of thousands of books and learning resources. The library provides full sets of course books and reference books along with journals, magazines and newspapers, and facilitate students with hassle-free services. The library is well equipped with broadband Internet and wireless connections, so that the students have access to enormous learning resources from all over the world.

Computer Center

The Computer Center at Kathford constitutes of 4 computers labs with more than 100 computers that are open for learning, programming, practicing, workshops and competitions. These labs are fully equipped with Internet connectivity and multimedia devices. The college encourages students to use computer center for e-learning, research and practicing, so that they can gain maximum knowledge and develop their programming and research skills.

Laboratories

Kathford has well equipped laboratories for digital and analog electronics, digital and analog communications, microprocessor, control system and networking. These laboratories have adequate resources available for students to conduct engineering laboratory assignments.

Conference Hall

Kathford has a spacious conference hall that accommodates more than a hundred students for conferences, seminars and guest speaker programs. It is well equipped with speakers' dais and audio-visual aids.

Cafeteria

Kathford has a well facilitated cafeteria for students and faculty members that serve good and hygienic food. The cafeteria is outsourced to external parties where the college makes quality check to ensure that the food are hygienic and the kitchen and dining halls are clean and tidy.

Sports

Kathford organizes a numerous sports activities and competitions. The premises provide convenient space to conduct in-house games that includes table tennis, basketball and futsal. Similarly outdoor venues are allocated for football, cricket and volleyball.

