HIMALAYA
COLLEGE OF ENGINEERING

(Affiliated to Tribhuvan University)

CELEBRATING 25 YEARS EXCELLENCE

- BE Electronics, Communication and Information
- BE Computer
- BE Civil
- B Architecture
- BSc CSIT
- BCA

Message from the CHAIRMAN

Dear Students,

Himalaya College of Engineering (HCOE), Nepal, affiliated to Tribhuvan University (TU), one of the most reputed private engineering college in Nepal, is proud of its many achievements as the leading developer of technical education for the students from diverse backgrounds, cultures and skill sets. We are among the few private academic institutions in engineering sector located in Kathmandu valley and the best suited for quality engineering education. Our vision is based on hard work, open communication, a strong emphasis on team work and a high level of responsibility. This visionary culture allows and emphasizes our wards not only to adopt the present day challenges but also individual responsibilities to the society and our nation at large. Learning should be based on doing things and not merely knowing things. Until and unless learning solutions relate to real life and motivate the learner to acquire and apply the knowledge, the whole process will remain superficial. Our institution has set specific objectives and planned activities for achieving excellence in all spheres of technical education.

Beyond providing a sound education, we wish to provide our students a holistic learning experience for life. Hence, we strive to travel beyond the boundaries of mere books. We have realized that the future is abstract and unknown but the youth in our hands are real and can be molded. Our mission is to prepare you as nation-builders, movers of technology and the agents of change. The knowledge that you will gain, the fine qualities that you will imbibe and the technical skills that you will learn to apply will be your major contribution to your parents, to society, and to the nation. We create not the future instead we craft you for the future. The service of HCOE in creating personally mature, professionally equipped and service-oriented graduates is really worth mentioning.

Together, let's build a future where your aspirations in engineering, architecture, and IT can thrive.

You are most welcome to HCOE, TU.

Mr. Bishnu Prasad Sharma
Chairman

Message from the PRINCIPAL

It is my great pleasure to welcome you all to the Himalaya College of Engineering (HCOE) located at Lalitpur Metropolitan City-09, Chyasal, Nepal. The HCOE was established in 2000 AD with the aim of providing high quality university education in Engineering and IT fields in Nepal. Six Bachelor level programs (Civil Engineering; Electronics, Communication & Information Engineering; Computer Engineering; Computer Science & Information Technology; Architecture; and Computer Applications) affiliated to the Tribhuvan University (TU) of Nepal have been running at the HCOE.

The HCOE has been providing high standard university education in Engineering, Architecture and Information Technology fields since its establishment. With the excellent infrastructure, other facilities and highly qualified, energetic & dedicated human resources, the HCOE is firmly committed to dealing with the changing trends and needs of the twenty-first century world both at national and international levels.

The existing old paradigm in the higher education sector of Nepal is being changed to meet the needs and standards of the 21st century. The salient features of these changes are in curriculum update & their deliveries to students, student assessments, integration of academic research with the conventional curriculum deliveries to students, developing basic industry required skills in university graduates, and learning & earning together for university students. The HCOE has already enrolled in the quality assurance (QA) process of the University Grant Commission (UGC) of Nepal, and we are confident that this step will lead us to achieve the requirements of the 21st century university education.

The HCOE is firmly committed to being in the lead position in the process of these changes of the 21st century university education and expecting cooperation & feedback from faculties, staff, students, parents, local communities and the regulatory organs.

Dr. Rabindra Raj Giri
Principal
Ph.D. in Biological and Environmental Sciences, Saitama University, Japan

The HCOE has been providing high standard university education in Engineering, Architecture and Information Technology fields since its establishment.

Introduction

Himalaya College of Engineering (HCOE) is affiliated to Tribhuvan University (TU), Nepal, and has served as a beacon of engineering and IT education since its establishment in June 2000 AD. The college offers Bachelor of Engineering programs in Computer Engineering (BCT), Electronics, Communication and Information Engineering (BEI), Civil Engineering (BCE), and Architecture (BAR), alongside Bachelor in Computer Science and Information Technology (BSC CSIT) and Bachelor in Computer Application (BCA).

Operated by a dedicated team of professionals and academicians with extensive experience in educational leadership, HCOE is part of the esteemed KMC Educational Network since May 2007. Situated at Chyasal, Lalitpur, the college features a state-of-the-art, seismic-resistant academic building spanning 57,600 square feet, with ongoing expansions to accommodate the growing student body and academic offerings.

Rigorous standards set by IOE and Nepal Engineering Council (NEC) are upheld at HCOE, ensuring that programs deliver the quality education demanded by today's dynamic professional landscape. Students of HCOE excel in various disciplines, consistently achieving top honors in IOE examinations.

Beyond academics, the college fosters a vibrant extracurricular environment. Students actively participate in the annual Himalaya Exhibition and technical competitions, engaging with peers from other engineering colleges. Inter and Intra College sports competitions are regular highlights, promoting teamwork and sportsmanship among students.

Moreover, departmental clubs such as the Himalaya Civil Club, Himalaya Electronics and Computer Club, Himalaya Information Technology Club, AATHA, and Robotics Club at HCOE play a pivotal role in enhancing the students' academic experience, practical skills and knowledge-sharing culture across disciplines through diverse activities.

HIMALAYA COLLEGE OF ENGINEERING

Our Philosophy

MISSION

To provide quality engineering education that equips graduates to tackle modern challenges through strategic planning across short, medium, and long-term initiatives.

VISION

To be a leading center of learning in science and engineering, offering diverse educational programs while promoting research, training, and consulting services.

GOALS

- Enhance academic excellence.
- Attract and graduate outstanding students.
- Integrate modern technology into teaching, learning, and research.
- Provide quality education at an affordable price, prioritizing educationally disadvantaged and marginalized groups.

OBJECTIVES

- Strengthen the country's technological capabilities by producing skilled and competent engineers.
- Promote quality engineering education through training programs, research, and consultancy services.

Academic Programs

Bachelor in Computer Engineering
(Intake: 48)

Bachelor of Computer Application (BCA)
(Intake: 35)

Bachelor in Architecture
(Intake: 48)

Bachelor in Electronics, Communication and Information Engineering
(Intake: 48)

Bachelor of Science in Computer Science and Information Technology (BSc CSIT)
(Intake: 48)

Bachelor in Civil Engineering
(Intake: 96)

Message from the
Vice Principal

Here, you will not only build structures, systems, and software-but also resilience, character, and dreams. You will gain not only knowledge, but also the courage to shape the world with it.

Dear Students,

It is with great pride and immense joy that I welcome you to **Himalaya College of Engineering (HCOE)**-a place where learning becomes a journey, and every journey shapes a future.

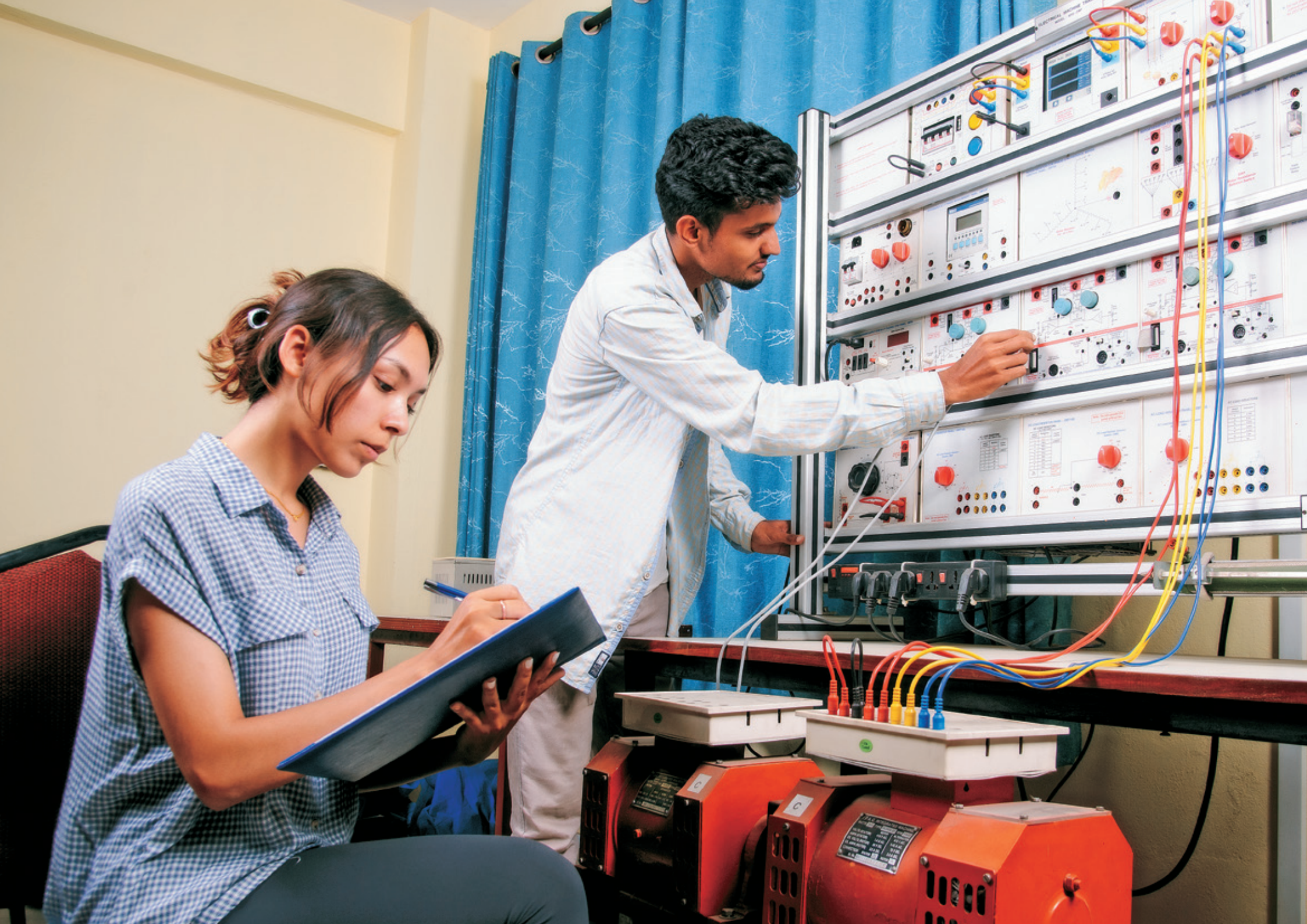
Choosing where to pursue your undergraduate studies is a defining decision, and we are honored that you are considering walking this path with us. Whether your interests lie in the world of **Computer Engineering, Electronics Communication and Information Engineering, Civil Engineering, Architecture, BSc. CSIT** or **BCA**, you will find a home here-a place to grow, to question, to create, and to lead.

At HCOE, education is more than instruction-it is inspiration. We blend academic excellence with practical exploration, innovation with discipline, and tradition with a vision for the future. Our experienced faculty, collaborative environment, and student-centered approach are all geared toward helping you reach your highest potential.

Here, you will not only build structures, systems, and software-but also resilience, character, and dreams. You will gain not only knowledge, but also the courage to shape the world with it.

On behalf of the entire HCOE family, I welcome you to a vibrant academic community. May your years here be marked by discovery, growth, and success.

With warm regards,
Associate Professor Er. Ashok G.M.
Vice Principal
MSc. in Information System Engineering



Bachelor in Electronics, Communication and Information Engineering

Bachelor's degree in Electronics, Communication and Information Engineering is a four-year (eight semesters) program with core and elective subjects accompanied by project works and Internship. The courses for this program include: Communication System, RF and Microwave, Antenna and Propagation, Microprocessor, Electronics Device and Circuits, Digital Logics, Artificial Intelligence, Robotics, telecommunication, Computer Network, Computer Programming and Object-oriented Programming. This course aims to provide the solid foundation necessary for the students to embark on a successful career in Electronics Engineering, Information Systems, Networking, System Administration, Software Development and Multimedia Computing fields. Popular and professional technical training programs are integrated into the major structure. The strong knowledge gained in this major structure prepares graduates for further studies or employment in a wide range of economic sectors like technology, business, banking, finance. and trading in Nepal, Asia and beyond.

The Department assists students to learn these subjects through Lectures, laboratory works and presentations. It also schedules field visits for students in different semester at sites like Radio station, Nepal Telecommunication Company, Satellite Station and Hydro Power Station to ensure the learning by doing. Total intake capacity for this programme at this college is 48.

Course Objective

- To produce highly competent professional in the field of Electronics. Communication and Information Engineering
- To Enhance the analytical and problem-solving capability of the students to handle current issues in Electronics, Communication and Information Engineering
- To provide specialized knowledge to the students in technical aspects of Electronics and Information Engineering and automation
- Develop professional skill in students to make them capable of carrying out sound knowledge in Electronics, Communication and Information engineering

Career prospect

Information Technology is amongst the areas that Nepal Government has identified for focused support to develop it faster in Nepal in each and every sector like banking, finance, business services, trading, legal and public administration sectors people with a solid background in technology are in great demand in this increasingly complex technological age.

Some of the Sectors where ElectronicsCommunication and Information Engineers can work:

- Nepal Government Offices
- Consumer Electronics manufacturing companies
- Telecommunication Companies
- ISPs
- Civil Aviation
- Hardware Design and production Industries
- Academic Intuitions
- ICT Industries
- Automotive industries
- Robotics
- Healthcare

Er. Devendra Kathayat
MSc in Information & Communication Engineering
HoD, Electronics and Computer Engineering

Himalaya College has well-equipped labs with impressive setup. The college follows a 3:1 student-to-group ratio, accommodating 24 students into 8 groups for electronics lab sessions. As per market trends, the college offers varying durations of hardware and software training each year, providing 30, 45, 45 and 60 hours of hands-on learning to ensure students are well-prepared with practical skills demanded by the industry. This approach not only enhances their theoretical knowledge but also equips them with the necessary technical proficiency to excel in their field upon graduation.

Course Structure

BACHELOR'S DEGREE IN ELECTRONICS, COMMUNICATION AND INFORMATION ENGINEERING

I Semester
Engineering Mathematics I
Computer Programming
Engineering Drawing
Fundamental of Electrical and Electronics Engineering
Engineering Physics
Engineering Workshop

II Semester
Engineering Mathematics II
Object Oriented Programming
Digital Logic
Electronic Device and Circuits
Engineering Chemistry
Electrical Circuits and Machines

III Semester
Mathematics III
Communication English
Computer Graphics and Visualization
Microprocessor
Advanced Electronics
Control System

IV Semester
Numerical Methods
Discrete Structure
Instrumentation
Computer Organization and Architecture
Electromagnetics
Signal and Systems

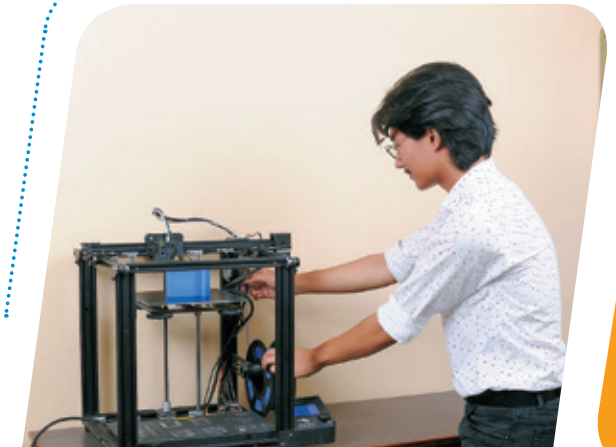
V Semester
Probability and Statistics
Artificial Intelligence
Filter Design
Embedded System
Propagation and Antenna
Elective I

VI Semester
ICT Project Management
Engineering Economics
Telecommunication and Computer Network
Communication Systems
Minor Project
Elective II

VII Semester
RF and Microwave Engineering
Robotics
Digital Signal Processing
Elective III
Project I
Wireless Communication

VIII Semester
Energy, Environment and Social Engineering
Internship**
Elective IV
Project II

** 8-Weeks Internship



Studying Electronics, Communication, and Information Engineering at Himalaya College of Engineering has been a remarkable journey so far. In my second semester, I have found the blend of theoretical and practical learning to be particularly beneficial. The faculty members are exceptionally knowledgeable and always willing to help with any queries. The hands-on lab sessions and projects have given me a deeper understanding of electronic circuits and communication systems. Participating in seminars and technical fests has broadened my perspective and provided valuable networking opportunities. I am confident that the skills and knowledge I am gaining here will be instrumental in my future career.

Sugam Dev Pant
HCOE079BEI016

PROGRAM
BE COMPUTER ENGINEERING
B ARCHITECTURE
BE ELECTRONICS, COMMUNICATION AND INFORMATION
BSC. COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
BE CIVIL ENGINEERING
CG
DELL
DELL

Bachelor in Computer Engineering

Bachelor's Degree in Computer Engineering is a four-year (eight semesters) program with 46 core and elective courses with Laboratory works, field visits and intership. Computer Engineering is a discipline that integrates several fields of electrical engineering and computer science required to develop computer hardware and software. It also deals with the design and development of computer systems and other technological devices.

Computer Engineers design, develop, and test systems and components such as processors, circuit boards, memory devices, networks and routers. They also develop and use computer programming languages to make Operating systems, applications (word processing, Spreadsheets, Graphics, CAD, CAM, audio, video, media and games).

The department assists the students to Learn these subjects through Lectures, laboratory works and presentations. Department also schedules field visits for students in different semesters at sites like Radio Nepal, Nepal Telecom, satellite station and hydro power station to boost up the students' knowledge Level. Total intake capacity of this programme at this college is 48.

Career in Computer Engineering

Computer Engineers are in high demand in different sectors where computer systems are implemented. They have options of moving into hardware or software positions or blending the two. Computer Engineers are employed as software engineer, hardware engineer, system analyst, database administrator, system developer, software programmer, network administrator, software architect, GUI developer and web programmer.

Some of the sectors where computer engineers can work are:

- >> Government Offices
- >> Internet Service Providers
- >> Banks
- >> IT Industries
- >> Manufacturing and Production Industries
- >> Telecommunication Service Providing Companies
- >> Artificial intelligence industry
- >> Robotics, cybersecurity
- >> Healthcare
- >> Academic Intuitions

"With a big dream and strong passion for engineering, I took a small step into HCOE. That step opened the door to my realization that engineering is more than just books. It incorporates a blend of support from our mentors, who guide us through this roller-coaster, all the people we encounter in our journey, and a perfect environment that nurtures our growth. With the balance in all these factors provided by HCOE, I continue my steps with optimism toward a brighter future."

Bidisha Amatya
HCE078BCT011

Course Structure (COMPUTER ENGINEERING)

Er. Ramesh Tamang
M.E in Computer Enginnering
DHoD, Electronics and Computer Engineering

Welcome to the field of computer engineering, where your imagination is the only limit. Embrace the challenges and opportunities ahead with curiosity and enthusiasm. HCOE is here to enrich you with knowledge and skill which encompasses the world.

I Semester
Engineering Mathematics I
Computer Programming
Engineering Drawing
Fundamental of Electrical and Electronics Engineering
Engineering Physics
Engineering Workshop

II Semester
Engineering Mathematics II
Object Oriented Programming
Digital Logic
Electronic Device and Circuits
Engineering Chemistry
Electrical Circuits and Machines

III Semester
Mathematics III
Communication English
Computer Graphics and Visualization
Theory of Computation
Foundation of Data Science
Microprocessor

IV Semester
Numerical Methods
Instrumentation
Electromagnetics
Data Structure and Algorithm
Data Communication
Operating System

V Semester
Probability and Statistics
Database Management System
Web Application Programming
Computer Organization and Architecture
Computer Networks
Elective I

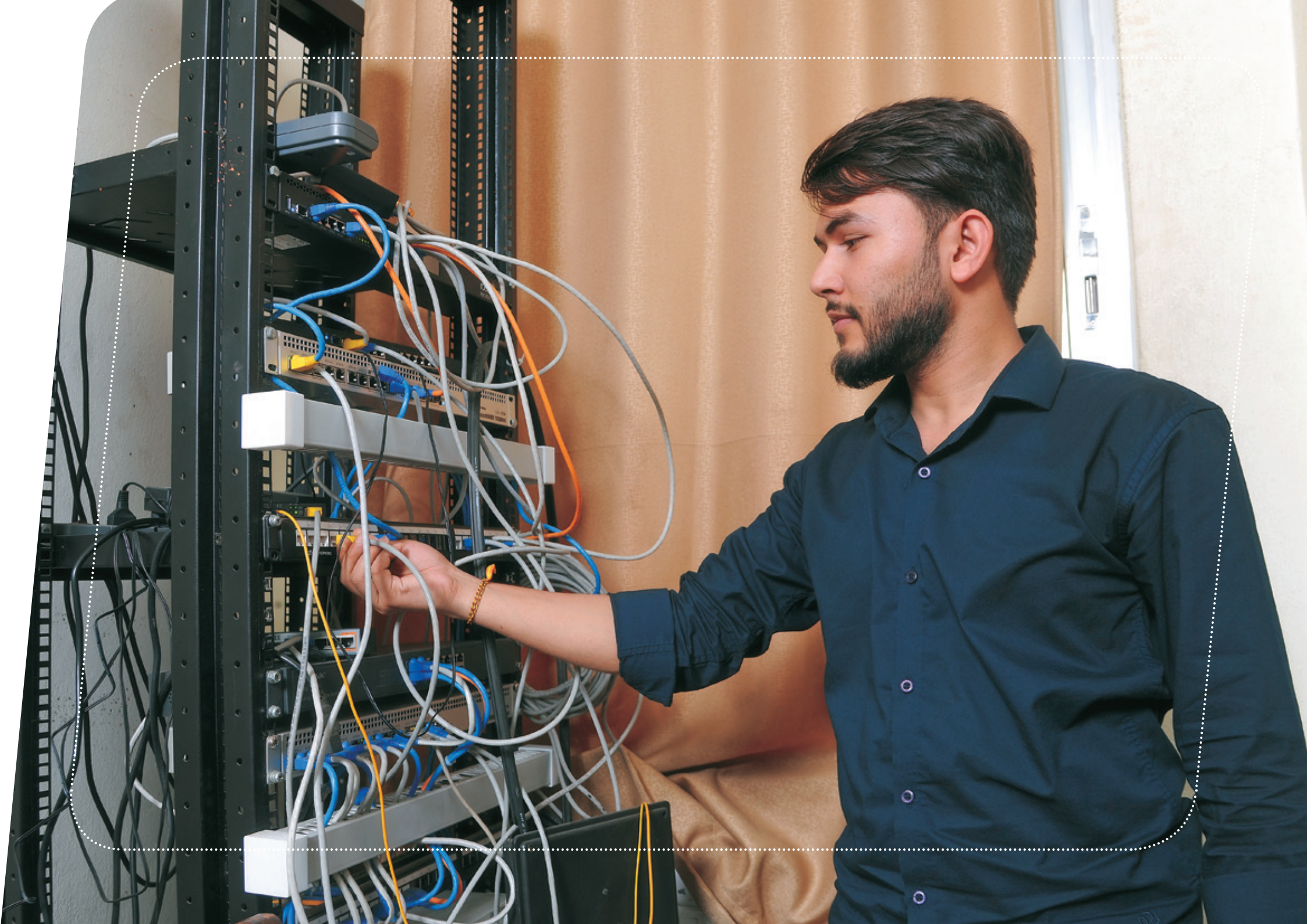
VI Semester
Engineering Economics
Artificial Intelligence
Software Engineering
Simulation and Modeling
Minor Project
Elective II

VII Semester
Digital Signal Analysis and Processing
Distributed and Cloud Computing
ICT Project Management
Energy, Environment and Social Engineering
Elective III
Project I

VIII Semester
Network and Cyber Security
Elective IV
Internship**
Project II
** 8-Weeks Internship

Joining the Bachelor of Computer Engineering program at Himalaya College of Engineering, for me, has been a transformative experience. In my second semester, I've already gained a solid understanding of the fundamentals, thanks to the engaging and knowledgeable professors. The practical labs and hands-on projects have helped me apply what I learn in the classroom to real-world problems. I appreciate the supportive environment and the opportunities to participate in coding competitions and workshops. These experiences have not only enhanced my technical skills but also boosted my confidence. I am excited about the future and grateful for the comprehensive education I am receiving here.

Saurav Singh Tajpuriya
HCE079BCT036



Bachelor in Civil Engineering

Bachelor's degree in Civil Engineering is a four year (eight semesters) course aimed for building infrastructures for the development of the nation. It mainly deals with the design, construction and research in its respective field. Nepal lies in an area where seismic activities and other natural disasters like landslides, floods and adverse effect of climate changes pose threat for the development of infrastructure. Hence this field of engineering has challenges to mitigate those effects. Increasing trend of urbanization needs to be addressed through proper planning, design and construction of water supply system, sewerage, roads and highways to cope up with rapid infrastructure development of the nation. This has become more contextual in the sense that our country is in the need of huge reconstruction in aftermath of earthquake and this obviously has led to the demand of good number of dedicated and industrious Civil Engineers.

Career in Civil Engineering

The Civil Engineering graduates have the prospective career opportunity at different private and public arena in national to international levels. They can work as:

- >> Government Officer
- >> Consultant
- >> Construction Expert
- >> Academician
- >> Researcher
- >> Entrepreneur
- >> Designer
- >> Project Manager

"Civil Engineering is a fascinating field of engineering, incorporating the laws of nature into a practical discipline. It has helped civilizations around the world reach their current state, and I am thrilled to be part of this discipline, especially at HCOE. The young and energetic faculty members, studious environment, and refreshing extracurricular activities organized in the college are a boon for young learners and future engineers, who are pillars of the nation. The enthusiastic teachers, willing to share their experience and knowledge through practical examples, help us learn about real-world practices and apply them. Furthermore, support for leadership programs, research programs, and extracurricular activities, which are crucial for developing character and values in students, is also provided by various departments. All these positives make me glad to be a part of HCOE."

Arnav Lamsal
HCE077BCE021

Er. MD Abrar Aalam
MSc in Structural Engineering
HoD, Civil Engineering

Welcome to the Department of Civil Engineering, where we design and build the future. Together, we'll innovate, create sustainable solutions, and ensure our structures stand strong for generations. Let's shape the world with excellence and resilience.

Course Structure (CIVIL ENGINEERING)

I Semester
Engineering Mathematics I
Engineering Chemistry
Computer Programming
Basic Electrical and Electronics Engineering
Engineering Mechanics
Engineering Geology I
Civil Engineering Materials

II Semester
Engineering Mathematics II
Engineering Physics
Engineering Drawing
Strength of Materials
Engineering Geology II
Engineering Survey I

III Semester
Engineering Mathematics III
Numerical Methods
Fluid Mechanics
Theory of Structures I
Engineering Survey II
Computer Aided Civil Drawing
Concrete Technology

IV Semester
Communication English
Probability and Statistics
Hydraulics
Theory of Structures II
Soil Mechanics
Water Supply Engineering
Building Technology
Survey Camp

V Semester
Design of Timber and Masonry Structures
Foundation Engineering
Design of Steel Structures
Transportation Engineering I
Sanitary Engineering
Engineering Hydrology
Engineering Economics

VI Semester
Estimating and Costing
Design of RCC Structures
Transportation Engineering II
Irrigation and Drainage Engineering
Professional and Social Engineering
Elective I

VII Semester
Operations Research
Project and Construction Engineering
Hydropower Engineering
Elective II
Elective III
Project I

VIII Semester
Project II
Internship ..

As a student of Himalaya College of Engineering, I have been fortunate to gain abundant knowledge and valuable experience. The college offers a platform to explore diverse subjects and interact with people from varied backgrounds, fostering personal development through its various clubs and organizations. The labs are well-managed and equipped, providing practical knowledge. Our faculty consists of highly qualified and experienced educators who are dedicated to guiding students through both basic and complex concepts, as well as their practical applications.

Abishek Pokhrel
HCE079BCE005

Er. Suvarna Singh Raut
Master's Degree in
Geotechnical Engineering, TU
Deputy Head/Senior Lecturer
Department of Civil
Engineering)

SUNRISE APARTMENT
UNIT L
UNIT Q
UNIT U3
LIHI DENNY PARK
APARTMENT
CASE STUDY

Bachelor in Architecture

Bachelor of Architecture or B. Arch as it is popularly known as is an undergraduate degree in the field of architecture and is a 5 years program in Nepal. Architecture is the art and science of designing spaces. To be more specific, architecture is the design of spaces both inside and outside of the built form. The diverse theoretical and practical courses allows students to gain knowledge in planning, designing and construction of buildings. The course also entails an internship which allows them to gain first hand experience in an architectural office which sharpens their skills and broadens their architectural visualization perspective.

In Nepal, B. Arch started in 1995 under Tribhuvan University whereas the same course in our college began in 2009 under the same university. In general, students with good visualization and sketching skills performs better in the course. However, in present context due to computer software any student with keen interest can enhance their understanding abilities and perform highly.

After the successful completion of the course and clearance of license exam conducted by Nepal Engineering Council students become professional architects with an authority to work in the government and private sector.

In an modern society, the role of architects have increased and has become more crucial. It goes beyond designing of buildings. A properly and well thought design can prove instrumental in creating better homes, better communities and spaces in general. Architects also keep pace with changing needs of the people and adapt to those. However, they also play a vital role in conserving and keeping intact our age old traditional buildings which symbolizes a history of a country or a community.

Course Objective

>> To produce high level technical manpower capable of undertaking works in the field of Architecture
>> Provide a comprehensive foundation in Architecture which demands knowledge of varied but interrelated disciplines

Career Prospects

>> After successful completion of the course architects can work in design firms, construction companies, academic institutions, NGO/INGO as an design or project architect.
>> They can also work in the field as an interior designer, conservation architect, product designer, 3D visualizer and free lance architect.
>> Also, by undergoing specialized masters courses they can also work as an urban planner and landscape architect.

Ar. Arjun Basnet
MSc. in Sustainable Architecture, NTNU, Norway
HoD, Architecture

Join the Department of Architecture at Himalaya College of Engineering and shape the future with innovative design and sustainable solutions. Learn from experienced faculty members dedicated to guiding you on your journey to becoming a visionary architect!

Course Structure (ARCHITECTURE)

I Semester
Mathematics for Architecture I
Design Studio I
Introduction to Architecture
Building Material I
Architectural Graphics I
Free Hand Sketching I

II Semester
Mathematics for Architecture II
Architectural Graphics II
Design Studio II
Building Construction I
History of Nepalese Architecture
Free Hand Sketching II
Applied Mechanics

III Semester
Design Studio III
History of Eastern Architecture
Building Materials II
Design Theory I
Building Science I
Building Construction II
Structure I

IV Semester
Design Studio IV
Building Science II
History of Western Architecture
Design Theory II
CAD and Drafting
Structure II
Surveying

V Semester
Design Studio V
Contemporary Architecture
Building Construction III
Working Drawing
Sociology and Culture
Communication English

VI Semester
Design Studio VI
Building Construction IV
Human Settlement Planning
Elective I
Estimation and Specification
Building Services I
Building Services II

VII Semester
Practicum

VIII Semester
Architectural Conservation
Design Studio VII
Sustainable Architecture
Construction Management
Elective II
Building Services III
Building Economics

IX Semester
Seminar & Directed Studies
Design Studio VIII
Professional Practice
Architectural Research for Thesis
Elective III

X Semester
Thesis

Architecture was a vague dream before I started at HCOE. Initially, my thoughts were confined to the aesthetic appearance of buildings. However, as I navigated through my teachers' slides and absorbed the insights of my generous mentors, I began to understand the unique blend of practical functionality and artistic vision. I delved into the intricate nuances of theories and developed creative problem-solving skills that enforced me to pay meticulous attention to design details. The collaboration with seniors, juniors, and peers extended the teaching-learning experience beyond the classroom. I witnessed how my friends excelled in their unique fields of interest and never hesitated to share their knowledge. The college hours, from 7 AM to 2 PM, were never a constraint. Time flies as you walk through the corridors of the Department of Architecture, but what endures is how you consistently evolve to better yourself as an architect.

Yujina Aryal
HCE079BAR035

Ar. Yam Prasad Rai
MSc Sustainable Environmental Design in Architecture(UoL, UK)
Deputy Head/Senior Lecturer
Department of Architecture

Bachelor of Science in Computer Science and Information Technology (BSc CSIT)

Bachelor of Science in Computer Science and Information Technology (BSc CSIT) is four years (eight semester) course affiliated to Tribhuvan University (TU). The course is designed to provide the students with knowledge in the information technology. The course is highly acceptable and demanding to the nation and IT industries. This programme provides the students with theoretical and practical knowledge which will enable students to solve complex problem of the IT industry. The programme develops the underlying principles of both Computer Science and Information Technology and show how these principles can be applied to solve real world problems. This program develops the skill that is essential for both computer professional and IT manager. It offers intensive knowledge in the theory, design, and programming.

Career in CSIT

The BSc CSIT graduates have prosperous career opportunities at different government, private and public organizations. Especially they work as:

- System Analyst
- Programmer
- IT officer/Manager
- Network Administrator
- Database Administrator
- System Administrator
- Software Developer
- Web Developer
- Project Manager
- Information System Manager

"Welcome, Bachelor in Computer Science and BCA students! It's a pleasure to have you join our department, where curiosity meets cutting-edge technology. Throughout your journey here, you'll explore diverse facets of IT and computer science, equipped with practical skills and theoretical knowledge. Our team is committed to supporting your academic growth and preparing you for a dynamic career in the digital world. Let's embark on this transformative experience together."

Er. Himal Chand Thapa
MSc in Computer System and Knowledge Engineering
HOD, CSIT/BCA

Course Structure (BSc CSIT)

I Semester
Introduction to Information Technology
C Programming
Digital Logic
Mathematics I
Physics

II Semester
Discrete Structure
Object Oriented Programming
Microprocessor
Mathematics II
Statistics I

III Semester
Data Structure and Algorithms
Numerical Method
Computer Architecture
Computer Graphics
Statistics II

IV Semester
Theory of Computation
Computer Networks
Operating Systems
Database Management System
Artificial Intelligence

V Semester
Design and Analysis of Algorithms
System Analysis and Design
Cryptography
Simulation and Modeling
Web Technology

VI Semester
Software Engineering
Complier Design and Construction
E-Governance
NET Centric Computing
Technical Writing
Elective I

VII Semester
Advanced Java Programming
Data Warehousing and Data Mining
Principles of Management
Project Work
Elective II

VIII Semester
Advanced Database
Internship
Elective III
Elective IV

Starting my studies at HCOE has been an eye-opening and life-changing experience. The college has provided great learning opportunities through its diverse lectures, engaging workshops, and beneficial educational activities. These have been important in my growth, both academically and personally. My professors have been great mentors, encouraging me to do my best, while the support from seniors, juniors and peers has kept me motivated and focused. I am very thankful for the supportive environment at HCOE, which has helped me to work confidently towards my goals.

Prajwal Bhattarai
HCE078CSIT030

Being a freshman in the tech world has made me realize the level of passion, skills, and knowledge required to thrive in this field. HCOE has been pivotal in helping me attain these qualities. The frequent workshops, in-college activities, trainings, and club engagements have encouraged me to think and learn outside the box. From the lecturers who provide excellent guidance and mentorship to the dedicated college faculty who coordinate with utmost commitment, HCOE has played a significant role in shaping my future. Here at HCOE, I am growing both personally and professionally.

Angel Khatri
HCE080CSIT04

Pursuing my academics at HCOE has been a transformative journey, shaping not only my studies but also my personal growth. I am thankful for our experienced and dedicated lecturers, whose excellent mentorship and consistent encouragement have been invaluable. The timely workshops and seminars provide valuable hands-on experience that contributes to both academic and personal development. I am truly grateful for the supportive and enriching environment at HCOE, which has been instrumental in every step of my growth and development

Bikesh Sapokta
HCE078BCA04

Organization Structure
(I) Functional
(II) projectized
(III) matrix
(IV) composite
Functional
CEO
staff
staff
staff
staff
Projectized
CEO
staff
staff
staff
staff

Bachelor of Computer Application (BCA)

Bachelor's degree in computer application (BCA) is a four year (eight-semester) undergraduate program in computer application affiliated to TU. The course covers wide application of computer as programming language, hardware and software, computer networks, worldwide web, database management system, logic, multimedia and many more.

Course Structure

Semester I: 16 Credit Hours
Computer Fundamentals & Applications
Society and Technology
English I
Mathematics I
Digital Logic

Semester II: 16 Credit Hours
C Programming
Financial Accounting
English II
Mathematics II
Microprocessor and Computer Architecture

Semester III: 15 Credit Hour
Data Structures and Algorithms
Probability and Statistics
System Analysis and Design
OOP in Java
Web Technology

Semester IV: 17 Credit Hours
Operating System
Numerical Methods
Software Engineering
Scripting Language
Database Management System
Project I

Semester V: 15 Credit Hours
MIS and E-Business
DotNet Technology
Computer Networking
Introduction to Management
Computer Graphics and Animation

Semester VI: 17 Credit Hours
Mobile Programming
Distributed System
Applied Economics
Advanced Java Programming
Network Programming
Project II

Semester VII: 15 Credit Hours
Cyber Law and Professional Ethics
Cloud Computing
Internship
Elective I
Elective II

Semester VIII: 15 Credit Hours
Operations Research
Project III
Elective III
Elective IV

Teaching Learning Approach

TEACHING FACILITIES

HCOE lays emphasis on quality and practical education. In order to meet this objective, the college has highly qualified and experienced faculty members for all the programmes. The faculty members of HCOE have long teaching experience and the visiting faculty have earned a wide range of work experience from reputed national and international engineering Colleges and universities. The College frequently arranges various seminars, workshops, and symposiums lectured by distinguished experts to broaden and enhance the expertise of its faculty members.

SCHOLARSHIPS AND AWARDS

The College awards scholarship to 10 percent of its students in enginnering programmes. The College also provides partial scholarship to meritorious and intelligent students.

CLASS SCHEDULE

The academic programs at HCOE run in the morning shift from 7:00 AM to 2:00 PM, Six days a week. The college administration however, remains opens up to 5:00 PM to facilitate the students, stakeholders, governmental and non-governmental officials. The college remain colsed on Monday. The field visits, survey field work, seminars, trainings, workshops, extra classes etc. may run beyond these official hours.

Interaction with Distinguished Personalities

14th June 2018 His Excellency, the Ambassador of Germany to Nepal, Roland Schafer visited Himalaya College of Engineering (HCOE), Chyasal and interacted with the students.

In an interaction session, His Excellency delivered an engrossing speech on the historical, political, social, economic and educational aspects of Germany. He also answered the students' queries on German's specialties. Excellency highlighted on German's historical efforts towards the journey of national prosperity. Saying that he was delighted to come as the Ambassador to Nepal, Schafer expressed his intuition that he was mesmerized by the country's natural, cultural, historical and archeological gorgeousness. He opined that he was enthusiastic about his visit to HCOE and for an opportunity to have a productive interaction with engineering students. Excellency encouraged students of HCOE to apply in Germany for further studies as Germany offers free education both to national and international students.

24th May 2018. NASA's former astronaut and scientist Er. Sandra Hall Magnus visited Himalaya College of Engineering (HCOE) and interacted with the students.

Addressing the assembly and special interaction program Er. Magnus shed some lights in her childhood goal to become an astronaut that she accomplished with the help of her rigorous studies and research. Becoming a scientist at NASA was a dream come true moment for her, hence, asserted that with concentrated effort, dedication and honesty anybody can accomplish his/her goal and reach destination. She gave highly informative presentation and was really happy to meet inquisitive budding engineers of HCOE. She replied to all the queries of the students though there were lots of queries asked to her.

Er. Sandra Hall Magnus encouraged all the faculty members to involve in creative research works. According to Magnus "research helps people to think what nobody has thought and it is research that made me what I am today".

IOE Toppers from HCOE

2062 & 65

Pratap Sapkota
BCT-2062 Batch

Roshan Maharjan
BCT-2065 Batch

Krishna Bdr. Kunwar
BCE-2065 Batch

Man Hari Dangol
BEX-2065 Batch

2066-67

Bijay Kumar Prajapati
BAE-2066 Batch

Gangadhar Sapkota
BEX-2066 Batch

Meera Shrestha
BAE-2066 Batch

Paras Panthi
BCE-2067 Batch

2068-69

Lucky KC
BCE-2068 Batch

Suroj Maharjan
BCT-2068 Batch

Rojina Pant
BCT-2069 Batch

Samundra Kumar Thapa
BEX-2069 Batch

Sarala Thapa
BEX-2069 Batch

2070-71

Sanjeeta Neupane
BAE-2070 Batch

Nisha Pradha
BAE-2071 Batch

Manjila Khanal
BCT-2070 Batch

Anuradha KC
BCE-2071 Batch

Namosi Tamrakar
BCT-2070 Batch

Swastika Paudel
BEX-2071 Batch

2073-76

Nitika Poudel
BCT-2073 Batch

Sanjog Nepali
BEI-2075 Batch

Sajan Lama
BAE-2074 Batch

Pratik Khanal
BCE-2076 Batch

Aagya Sharma
BCT-2074 Batch

Samarpan Ghimire
BEI-2076 Batch

Physical Facilities

The college has its own seven storey building having total area of 57,600 square feet for academic programs. There are four other buildings for labs, workshops, project works and cafeteria in the area of 24 Ropani. These buildings have sufficient space for class rooms, labs, workshops, offices, seminar hall and research centre. The college has indoor and outdoor game facilities and student-centered activities. A hall with an area of 3,200 square feet can accommodate 250 students for ECA programme.

LIBRARY

HCOE's library has online facility which has a huge collection of text books, references books. More than 22,000 and course manuals and reports about 4,000. It subscribes to various newspapers, magazines, course book and national and international research journals for its different departments. The new books are regularly added in the library. The library provides books to students under the book bank system and regular renewing system. The HCOE library uses library software and provides services by e-library to the students.

LABORATORY

HCOE has developed fully equipped laboratories of all disciplines. These have large number of modern equipment and instruments as laid by IOE and NEC. Some labs such as physics, chemistry, thermodynamics etc. are shared in common by all programmes while some are specific labs. The equipments are regularly maintained and new ones are added regularly.

PHYSICS LAB

The college has well-developed physics lab with a darkroom.

CHEMISTRY LAB

The chemistry lab is spacious and well equipped with latest instruments and apparatus.

WORKSHOP LAB

Workshop is segregated into machine, welding, sheet metal and carpentry. The carpentry lab is designed for the students of Architecture for wood works.

ELECTRICAL LAB

Electrical lab, fully equipped with highly sensitive instruments, is shared by all the programmes for basic electrical engineering, electrical machines, instrumentation and control system. The college is going to developed power lab and switch gear protection for the proposed programme of BE Electrical Engineering.

ELECTRONICS LABS

The five electronic engineering labs in the college are basic electronics, advanced electronics, communication system, digital electronics and project lab. These are equipped with latest instruments. The labs are updated as the technology changes to provide latest information in the concerned field.

COMPUTER LABS

The college has seven computer labs for computer engineering CSIT and BCA, and also shared by other programmes. Each lab consists of 30 computers which are equipped with latest high-tech computing facilities and fully supported by suitable application software. High speed internet and intranet facilities are available in the labs.

CIVIL ENGINEERING LABS

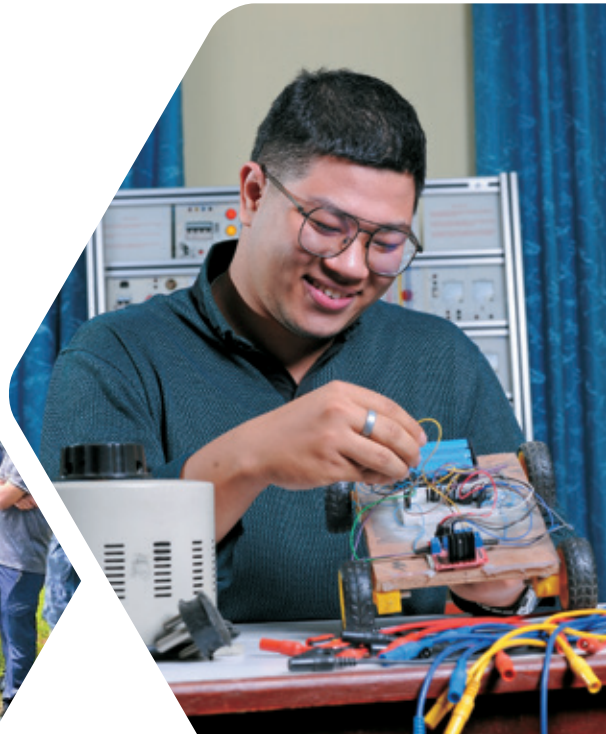
Civil Engineering programme has various labs on civil engineering materials, strength of materials, fluid mechanics and hydraulic, structure, soil mechanics, water supply engineering, engineering geology, concrete technology, RCC structure, environmental engineering, transportation engineering and hydropower engineering lab.

SURVEYING LAB

Surveying lab is fully equipped with modern and latest instruments used for civil engineering and architecture programme.

VISUAL SKETCH LAB

This lab is designed for architecture programme where the visual sketching on monumental objects is done.



CAFETERIA

Cafeteria is available within the college premises. It serves breakfast, lunch and various bakery products at reasonable costs. It serves a variety of hygienic food.

SPORTS

Every year, a sport week is conducted in the college in which many students participate. The college has basketball, badminton and table tennis courts within the college premises. Outdoor games like football and cricket are played on ANFA football ground, Chyasal and cricket ground in the valley respectively. Students regularly participates on sport events organized by other colleges.

TRANSPORTATION

The college provides transportation for students to site visits, field works, and study tours on college buses. As the college is located in an easily accessible place, most of the students use public transportation. However, the college is planning to provide bus services for students and faculty members in future.

INTERNET

Students are facilitated by high speed, 50 mbps, online browsing of the internet in the college. The computer laboratories provide the internet service throughout the college hours and 24 hours during project works.

GUIDANCE AND COUNSELING SERVICES

This unit looks after the welfare of students, collective as well as individual, which requires correct and prompt addressing for the overall efficiency of the students. This department was established to address the situation and help students concentrate on studies as their primary task.

JOB PLACEMENT SERVICES

The college tries to bridge the students to the industries by producing capable candidates. As per previous practices, many students have shown high professional strength. So, counseling and follow up services are more applicable for the students. HCOE has made MOU with Finishing School, India, National School of Skill Development, India and TOYO works Company Ltd., Japan for placement of the graduates.

RESEARCH AND PROJECT WORK

The college encourages the students for research work. Individual student start research work from the very beginning, and finally undertake project work. HCOE encourages its faculties also for research and development. Many research works are conducted by Kathmandu Model Research Foundation, which is partner of the network.

SEMINARS, WORKSHIPS AND TRAININGS

Himalaya College of Engineering offers ample number of out of course trainings at different departments. The aim of this activity is to develop knowledge and skills in recently emerging technologies and programing languages on students that help in their project works and academic courses. These trainings help the students to explore the theoretical knowledge via physical devices as well as simulation and in professional career.

Admission Procedure

Students who have passed the entrance examination conducted by IOE are eligible for admission at HCOE. Students having a minimum score of 45% in I. Sc. or 10+2 with 200 marks math paper or Diploma in Engineering or an equivalent course recognized by TU can appear in the entrance examination.

The eligible students have to fill up the online form available on the website http://entrance.ioe.edu.np or www.ioe.edu.np and have to appear in a two hour computer based examination. The subjects for the examination are: English, Mathematics, Physics, Chemistry, Basic concept of drawing.

Successful students in entrance exam get admission on the merit basis. They should fill up the college admission forms and will be admitted with commitment to college rules and regulation.

Why Himalaya College of Engineering ?

- Amicable teaching learning environment
- Highly experienced and professionally committed faculties
- Well-equipped labs and well-stocked e-library
- Use of multimedia, audio and visuals in teaching
- Easy location, accessible from the all directions
- TU affiliated programs with worldwide recognition
- Number of IOE Semester toppers in different programs
- Access of high speed Wi-Fi zone
- Provision of various scholarships
- Individual students encouraged to undertake various learning activities
- Seminar, workshop and training in regular basis
- Engineering design related training at regular basis
- College supports for the innovative extra-curricular activities
- High successful rate in employment of its graduates.
- Dynamic and ever success Robotics Club

Student Clubs in HCOE

Himalaya Civil Club

Himalaya Civil Club (HCC), established on 2068, is an active students' society of Himalaya College of Engineering developed as the platform for civil engineering students to enhance their creativity and career development skills.

HCC organizes various events like Civil Quiz, seminar, training, workshop, inter-college exhibition. HCC also publishes a yearly students' magazine which contains articles with special supplement of journals, research papers, inventions and similar informative articles related to civil engineering.

Himalaya Electronics and Computer Club

Himalaya Electronics and Computer Club (HECC), established on 2017 AD, is an active students' society of Himalaya College of Engineering founded as the platform for electronics and computer engineering students to enhance their creativity and career development skills. It provides an opportunity for the students to keep themselves updated with the latest advancement in technology through the club activities.

Himalaya Information Technology Club (HIT Club)

Himalaya Information Technology Club (HIT Club), established on 2017, is a students' society of student of computer Science and information technology (CSIT) in Himalaya College of Engineering. It addresses developing technological needs of the students as well as provides technical assistance.

ASTHA

Architectural Students of Himalaya (ASTHA), established in 2068, is a students' organization founded by the architecture students of Himalaya College of Engineering, with a sole purpose to boost interaction, co-operation, creative and leadership skills of students.

Robotics Club

Robotics club of Himalaya College of engineering was established in 2007 A.D. , which includes students mainly from Electronics & Computer Engineering department and partially form others. Robotics club organizes various events like workshop, training, and seminar on existing and latest technology.

HCOE Alumni Association

As the President of the Alumni Association and guest lecturer in HCOE, I am proud to highlight the exceptional journey of our college, our institution has consistently provided a dynamic and intellectually stimulating environment that has equipped our graduates with the skills and knowledge to excel in the ever-evolving field of engineering and technology. The commitment to academic excellence, innovative research, and practical applications has produced leaders and innovators who are making significant contributions worldwide. I am honored to be part of this quality education and strong foundation provided and to celebrate the achievements of our distinguished graduates.

Er. Hari Prasad Aryal
President, HAA
BE Computer: 2058 Batch
National Payment Switch (NPS), Coordinator (NCHL)

HCOE Alumni Association welcomes all new students to our esteemed institution. Our college has a proud tradition of excellence, and we are thrilled to have you join this vibrant community. The Alumni Association is dedicated to fostering a lifelong connection among graduates and supporting the continuous growth of our students. As new members, you will benefit from a network of accomplished alumni who are eager to mentor, guide, and share their experiences with you. We are excited to see you thrive and contribute to the legacy of innovation and achievement that defines our college. Welcome to the start of an incredible journey!

Himalaya Exhibition

Every year, our esteemed institution, Himalaya College of Engineering, organizes the highly anticipated Himalaya Exhibition, a platform dedicated to showcasing the practical applications of theoretical knowledge in the fields of computer engineering, civil engineering, architecture, BCA, and BSc CSIT. This event serves as a testament to our commitment to fostering innovation and practical learning among our students.

The exhibition features a diverse array of projects and innovations, each highlighting the creativity, technical expertise, and dedication of our students. From cutting-edge software applications developed by BCA and BSc CSIT students to sustainable building designs conceptualized by architecture students, and from innovative civil engineering projects addressing infrastructural challenges to advanced computer engineering solutions pushing technological boundaries, the Himalaya Exhibition encapsulates the breadth and depth of our academic programs.

Through this platform, students not only demonstrate their proficiency in their respective disciplines but also engage with industry professionals, academics, and peers to exchange ideas, garner feedback, and explore potential collaborations. The exhibition not only celebrates achievements of the students but also encourages them for continuous learning, critical thinking, and practical problem-solving skills essential for success in the competitive fields of engineering and technology.

Trainings and Workshops

We provide following additional trainings.

Department of Electronics & Computer Engineering, and CSIT

- Basic Hardware troubleshooting and PCB Design
- Arduino Programming
- Web Page designing and PHP
- Java Programming
- Python + Rasberry PI
- C#.NET
- FPGA HDL Programming
- Advanced Java Programming
- Python : django
- Android Programming
- CCNA
- Oracle
- System Admin using Linux
- Mobile Application Development (Flutter and Java)
- Python with Data Science
- React.JS
- MERN Stack

Department of Civil Engineering

- SAP 2000 (Structural Analysis Programme)
- Smart Road (Road Design Software)
- GIS/Plaxis 2D, 3D
- AutoCAD (Engineering Drawing Software)
- Workshop on Potalab (Water Supply)
- Training on HEC-RAS (Hydrology)
- Workshop on Retrofitting Techniques of Building Structure

Department of Architecture

- Sketch up Software Trainings for Third year I part
- Photoshop Training for Third Year II part
- Model Making Training First year

Research and Innovation Unit

Research and Innovation Unit (RIU) at Himalaya College of Engineering is established to create a conducive Research Environment at the college. Research Management Committee (RMC), under RIU has been formed in the college through which students and faculties are getting support to accomplish all research related project works including exhibitions, conferences, tracings, workshops, excursion tours etc.

Broadly the unit aims to

>> Establish and design incubation centers and developing lab facilities

>> Support students and faculties to strengthen their research capacity and perform their research projects and publish their papers in the best National and International Journals including Journal of Himalaya College of Engineering.

>> Collaborate with various national and international academic as well as research institutions for conducting conference and publish Journal.

The College organized the 1st Himalaya International Conference in Feb 2022 and published the Journal of Himalaya College of Engineering, JHCOE, and ISSN 2961-1961, that was launched on Feb 2023. The Unit is conducting 2nd International Conference and publishing 2nd Volume of JHCOE soon.

Dr. Er. Shanti Kala Subedi
Research Coordinator

Team Himalaya

KMC EDUCATIONAL NETWORK

HIMALAYA COLLEGE OF ENGINEERING
(Affiliated to Tribhuvan Univeristy)

Chyasal, Lalitpur
Tel:+977-01-5440555, 5454287
hcoe.edu.np

BE Civil | B. Architecture
BE Electronics, Comm. & Information
BE Computer | BCA | B.Sc. CSIT

KATHMANDU MODEL SECONDARY SCHOOL
(BAGBAZAR, KATHMANDU)

Bagbazar, Kathmandu
Tel: 5328321, 5342775
ktmmodelcollege.edu.np

+2 SCIENCE
MANAGEMENT
LAW
HUMANITIES

Apollo International College
(Affiliated to Pokhara University)

Lakhechaur Marg, New Baneshwor, KTM
Tel: 4474845, 4474851
appollointcollege.edu.np

MBA I BBA I BBA-Finance I BHM I BCSIT

KMC School

Buddhanagar, Kathmandu
Tel: 4797111, 4792016
kmcschool.edu.np

PLAY GROUP
TO
GRADE X

MIT
MODEL INSTITUTE OF TECHNOLOGY
A College Inspiring Innovative Intelligence

Bagbazar, Kathmandu
Tel: 5901393, 9851344685
mitnepal.edu.np

BBA
BIT
MBA

UNIVERSAL ENGINEERING & SCIENCE COLLEGE
(Affiliated to Pokhara University)

Chakupat, Patan, Lalitpur
Tel: 5260419, 5260592
universalsc.edu.np

BE Civil
BE Computer
B. Architecture

Master of Science in Construction Management (MSc CM)
Master of Science in Transportation Engineering & Management (MSc TEAM)

KATHMANDU MODEL COLLEGE
(AFFILIATED TO TU)

Bagbazar, Kathmandu
Tel: 5342121, 5342015
kmcen.edu.np

BBA | BBM
BCA | BA | BBS
MBS | MA in English

KATHMANDU MODEL SECONDARY SCHOOL
(BALKUMARI, LALITPUR)

Tel:+977-01-5201331, 5201334
ktmmodelcollege.edu.np

+2 SCIENCE
MANAGEMENT
LAW
HUMANITIES

New Summit College

Santinagar, Kathmandu
Tel: 4620522, 4620523
uc.edu.np

BBA | BBM | BBS
BSW | BA | BCA
BSc. CSIT | MA in English

BUTWAL MODEL COLLEGE
(Affiliated to Pokhara Univeristy)

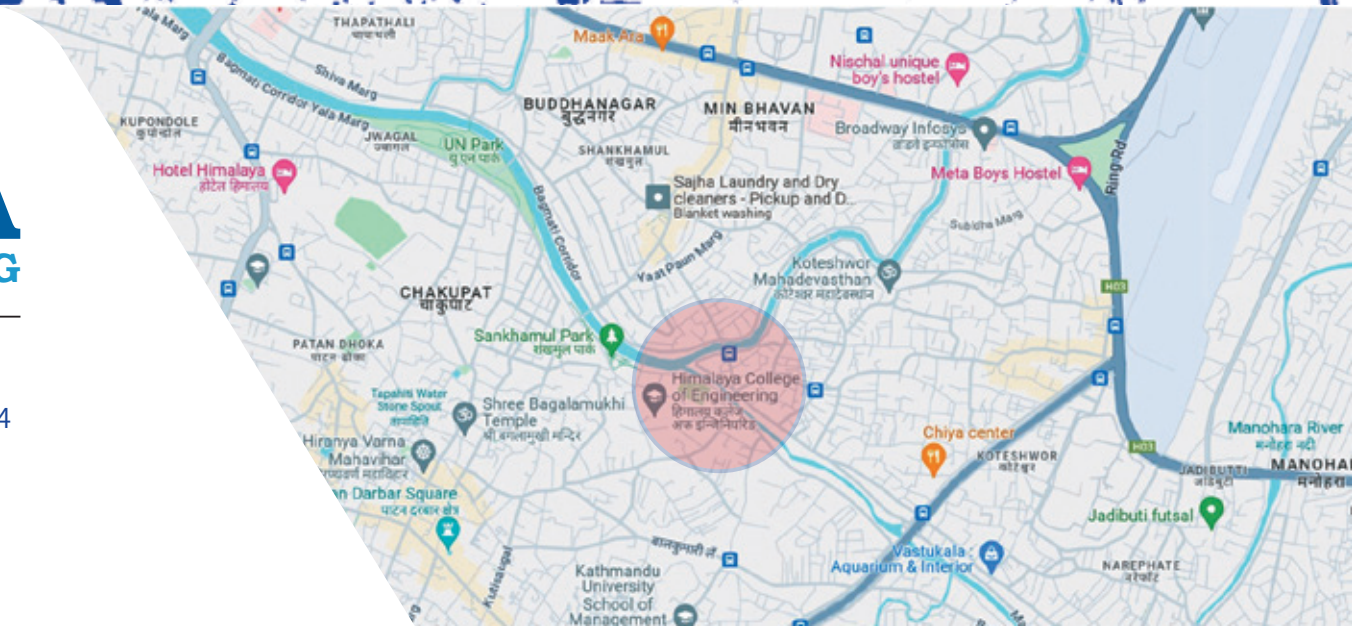
Padsari, Rupandehi
Tel: 429192, 429193
butmc.edu.np

BBA
BHM
MPGD

WEBSITE

LOCATION

HIMALAYA
COLLEGE OF ENGINEERING

(Affiliated to Tribhuvan University)

Chyasal–9, Lalitpur, Nepal,
+977-01-5440555, 5454287, 5454297, 5424344
info@hcoe.edu.np www.hcoe.edu.np