

23 Years of Excellence

*Engineering the Future*

**BE**

**COMPUTER | CIVIL | INFORMATION TECHNOLOGY  
SOFTWARE | ELECTRONICS & COMMUNICATION**



**NCIT**  
Nepal College of Information Technology  
(Affiliated to Pokhara University)

## Vision

To be the leading IT & Engineering College in Nepal that prepares competent & responsible professionals who contribute to shaping a better society

## Mission

NCIT seeks to deliver high-quality education by adopting the best teaching-learning practice in IT & Engineering. We endeavour to strengthen our students with necessary knowledge & skills for professional competence.

NCIT aims to promote a culture of innovation & research and a spirit of entrepreneurship in its students. We strive to instill moral values & professional ethics in our students to become good citizens.

## Values

-  **Respect**
-  **Honesty**
-  **Responsibility**
-  **Transparency**
-  **Dedication**
-  **Collaboration**
-  **Professionalism**





# NCIT | The Leading IT & Engineering College in Nepal

NCIT, a pioneer private institution providing engineering education in Nepal, is renowned for excellence in teaching & research while maintaining close and mutually beneficial links with various sectors.

Today, NCIT is one of the first choices of students for important reasons you would consider when applying:

<b>2000+</b>	<b>10</b>	<b>7000+</b>
Students (Bachelor's & Master's)	Bachelor's & Master's Programmes	Alumni
<b>70+</b>	<b>100+</b>	<b>200+</b>
Districts Represented	Full-Time / Visiting Faculty	Full Scholarship Recipients 500+ Partial Scholarship Recipients
<b>200+</b>	<b>50+</b>	<b>100+</b>
Job Placements Annually	MOU Institutions	+2 Colleges Represented
<b>50+</b>	<b>25+</b>	<b>30+</b>
Activities & Seminars Annually	Innovative Startups Annually	Research Articles Annually
<b>528+</b>	<b>5+</b>	<b>7</b>
Annual Intake Capacity at Bachelor's & Master's Level	International Academic Professional Collaboration	3 VC Medal Awardees & 4 Chancellor Medal Awardees



Dear All

It is our great pleasure to inform you that Nepal College of Information Technology (NCIT), a pioneer engineering college in Nepal, offers five sought-after engineering programmes at undergraduate level – BE in Civil, Information Technology, Computer, Software, and Electronics along with three graduate level programmes – Master of Computer Engineering, Computer Science, and Computer Information System, all affiliated to Pokhara University (PU).

Offering an excellent learning atmosphere in a state-of-the-art infrastructure with a competent and committed faculty, NCIT focuses on instilling entrepreneurship and innovation among its students. The College nurtures individual talent by imparting practical knowledge that supports ongoing social changes and economic advances. We mould our students into competent professionals with a global outlook through the dissemination of knowledge by leading academicians and eminent entrepreneurs alongside corporate interaction and institutional linkage.

We trust that the various engineering programmes and profuse academic and professional exposure we offer at NCIT will elevate you as renowned technocrats, successful entrepreneurs, competent leaders, innovative scientists, and able researchers.

We wish you all exceptional academic and professional achievement at NCIT!

**Bijuli Prasad Rana**  
Executive Director





Dear Prospective Students

We are elated to welcome you all to Nepal College of Information Technology (NCIT) for your graduate studies in engineering.

With its splendid legacy of excellence, NCIT empowers students with sophisticated knowledge, equips them with training, workshops & seminars, and shapes them into competent and demanding professionals in the local and global arena. Also, the College strives to nurture creativity, inculcate critical thinking, and mould their personality through diverse elective courses, technical paper presentations, field visits, survey camps, and various co-curricular & extracurricular activities. The spectacular performance of our students in the university examinations and their notable placements in Nepal and abroad after their graduation are testaments to the quality of education at NCIT.

Surely, NCIT's top-class infrastructure, innovative learning atmosphere, and professionally acclaimed educating community would prove that this College is a shrine of learning for you and would play a pivotal role in shaping your career in engineering.

We wish you great success in your academic journey!

Best regards

**Er Niranjana Khakurel**  
Principal

# Pokhara University

Pokhara University (PU) was established in 1997 under the *Pokhara University Act, 1997*. PU was formed under government policy for improved access to higher education. The main function of Pokhara University is to produce skilled human resources necessary for national development by providing quality education. In order to achieve such an objective, it has a semester system-based curriculum and an evaluation methodology with high priority given to practical knowledge and research.

The University students imbibe critical thinking skills, develop positive attitude to work, and enhance their competitiveness. Pokhara University, the youngest university system operating full-fledged programmes in Nepal, aims at producing human resources capable of working for the nation as well as the global community.

## PU – Institutional Tie-Ups

The following is a list of some of the institutional partners of PU. Being an affiliated college, NCIT too has the right to collaborate with any, some, or all of these institutions thereby making our BE degrees powerful tools in the hands of our engineering graduates enabling them to study or work in different parts of the world.

SN	Universities/Institutions	Countries
1	Central Queensland University	Australia
2	Independent University	Bangladesh
3	International University of Business Agriculture and Technology (IUBAT)	Bangladesh
4	Jilin University	China
5	University of Science and Technology	China
6	Sichuan University	China
7	Institute of Foreign Trade and Management	India
8	Panjab University	India
9	University of Roorkee	India
10	KIIT University	India
11	India Council for Cultural Relations (ICCR)	India
12	Shree Chitra Tirunal Institute for Medical Sciences and Technology	India
13	The University of Rome "Tor Vergata"	Italy
14	University of Padova (UNIPD)	Italy
15	Institute of Technology Sepuluh	Indonesia
16	University Under Forum for Integrated Development of Eleventh University	Indonesia
17	Showa Pharmaceutical University	Japan
18	Institute of Natural Medicine, Toyama Medical & Pharmaceutical University	Japan
19	National University Corporation Ehime University	Japan

SN	Universities/Institutions	Countries
20	Kumamoto University	Japan
21	Yonsei University	Korea
22	Institute of Oriental Medicine, Dongguk University	Korea
23	Sun Moon University	Korea
24	College of Engineering, Pusan National University	Korea
25	National Information Society Agency	Korea
26	Handong Global University	Korea
27	University of Sains, Penang	Malaysia
28	The University of Nordland (Bodø University College)	Norway
29	University of Tromsø	Norway
30	Institute of Business Management (IOBM)	Pakistan
31	University of Warsaw	Poland
32	Emilio Aguinaldo College	Philippines
33	Asian Institute of Technology	Thailand
34	Shinawatra University	Thailand
35	Kingston College of London	UK
36	St. Cloud State University	USA
37	Clafin University	USA
38	Georgia Southwestern State University	USA
39	Hanoi University of Science	Vietnam
40	Arizona State University	USA

# Academics

## General Information

### Academic Schedule

The academic session of the College consists of two semesters per year for each programme. Normally, the Fall semester starts in August and the Spring Semester in February.

### Credit System

Each Course is assigned credits based on work hours utilized per week for lectures, tutorials, and practicals. One lecture on theory per week is assigned one credit as a general rule.

### Study Duration

The normal duration for completing the BE programme at the College will be four years. The maximum duration, however, for the completion of the degree shall be the normal duration plus four years.

### Semester System

Our BE programmes have 8 semesters, and each semester is normally six months long. The academic records are maintained based on the number of courses registered by a student in each semester.



## Evaluation System

### Areas

The academic performance of students during a semester is evaluated by the system of continuous assessment (evaluation of semester work plus the final examination results). The College conducts semester work and final examinations.

### Weightage

Each course has 50% marks based on semester performance, evaluation by the assigned teacher, and 50% marks for the written examination at each semester end. In Practical Courses, the semester marks are awarded on the basis of continuous assessment but no final examination is conducted.

### Grading

The grades (marks) awarded to a student in a Course are based on his or her consolidated performance in semester work and final examinations. The Letter & Grade in any particular subject is an indication of a student's relative performance per Description in that Course as follows:

Letter	Grade	Grade Point Description
A	4.0	Excellent
A-	3.7	
B +	3.3	
B	3.0	Good
B -	2.7	
C+	2.3	
C	2.0	Satisfactory
C-	1.7	
D+	1.3	
D	1.0	
F	0	Failed

### GPA

The performance of a student in each semester shall be evaluated in terms of the Semester Grade Point Average (SGPA). Further, the grade point average for all completed semesters, with regard to student performance evaluation, is the Cumulative Grade Point Average (CGPA).

**Attendance** – Mandatory 80% semester-wise for each subject in each programme



**A DEEP UNDERSTANDING  
OF COMPUTER  
TECHNOLOGY WILL  
ALWAYS BE ESSENTIAL IN  
OUR 'WIRED SOCIETY'.**

*List of Activities  
to university  
Art Infrastructure  
Patents*





# Bachelor of **COMPUTER ENGINEERING**

**Bachelor of Computer Engineering (BE Computer)** provides students with a foundation in the core computer technologies. The programme covers the theoretical and practical aspects of both hardware and software. Professionally, it instills the knowledge of making computing platforms more effective, embedding computing devices in machines & systems, and developing faster, smaller, and more efficient computers. It also deals with further advancements globally in digital technology, computer networking, and computer systems.

## Key Learning Outcomes

- Use the techniques, skills, and tools in computer engineering, software & hardware system design, and information technology to work independently
- Design hardware & software systems, components, or processes to meet economic, environmental, or social needs
- Set up and conduct experiments, as well as organize, analyze, and interpret data to help deeper understanding of principles and applications
- Identify, formulate, and solve hardware & software problems to ensure effective practice of computer technologies
- Analyze problems for solutions, formulate & test, and use advanced communications or multi-media equipment, or work in teams for product development





## Career Prospects

Computer Engineering is an exciting and growing industry involving the design and development of software like network control systems or operating systems for computer and mobile technology. There are many career opportunities like System Administrators, Network Engineers, OS Developers, and Ethical Hackers.

Computing professionals might find themselves employed in a variety of environments in academia, research, industry, and governmental, private & business organizations.

## Careers by Area

### Computer Engineering

Computer Engineers, Computer Programmers, or Computer Network Architects in the IT & Computer field

### Hardware & Networking

Computer Network Architects, System Engineers, Networking Engineers in IT-based organizations

### Artificial Intelligence

Develop computers that simulate human learning and reasoning abilities

### Computer Design & Engineering

Design new computer circuits, microchips, and other key electronic components

### Software Engineering

Develop methods for the production of software systems on time, within the budget, and without defects

### Operating Systems & Networks

Develop basic software for computers or use it for communicating with other computers

### Software Applications

Apply computing technology to solve problems outside the everyday computer field, for example, in education or medicine

### Information Technology

Develop and manage information systems that support a business or organization

### Data Analytics

Data analytics is the collection, transformation, and organization of data in order to draw conclusions, make predictions, and drive informed decision making.



# COURSE STRUCTURE

## Year I, Semester I

Code	Subject	Credits
MTH 110	Calculus I	3
ELX 110	Digital Logic	3
CMP 124	Programming in C	3
ELE 120	Basic Electrical Engineering	3
CMP 122	Computer Workshop	1
ENG 110	Communication Technique	2
ELX 110	Electronics Devices & Circuits	3

## Year II, Semester III

Code	Subject	Credits
MTH 210	Calculus II	3
CMP 222	Database Management System	3
CMP 232	Operating Systems	3
CMP224	Microprocessor & Assembly Language Programming	3
CMP234	Computer Graphics	3
CMP 220	Data Communication	3

## Year III, Semester V

Code	Subject	Credits
MTH 216	Probability & Statistics	2
ELX 320	Embedded System	2
MGT 320	Engineering Management	2
CMP 346	Artificial Intelligence	3
CMM 344	Digital Signal Analysis Processing	3
CMP 346	Software Engineering	3

## Year IV, Semester VII

Code	Subject	Credits
MGT 332	Entrepreneurship & Professional Practice	2
MGT 250	Engineering Economics	3
CMP 426	Network & Cyber Security	3
CMP 424	Cloud Computing & Virtualization	3
CMP 360	Data Science & Analytics	3
	Elective II	3

## Year I, Semester II

Code	Subject	Credits
MTH 150	Algebra & Geometry	3
PHY 110	Applied Physics	3
CHM 110	Applied Chemistry	2
MEC 116	Basic Engineering Drawing	1
CMP 162	Object Oriented Programming in C++	3
CMP 160	Data Structure & Alogrithm	3
ELE 172	Instrumentation	3

## Year II, Semester IV

Code	Subject	Credits
MTH 250	Applied Mathematics	3
MTH 257	Numerical Methods	2
CMP 228	Advanced Programming with Java	3
CMP 254	Theory of Computation	3
CMP 262	Computer Architecture	3
CMP 270	Research Fundamentals	2

## Year III, Semester VI

Code	Subject	Credits
CMP 362	Image Processing & Pattern Recognition	3
CMP 364	Machine Learning	3
CMP 422	Compiler Design	2
CMP 344	Computer Networks	3
CMP 338	Simulation & Modeling	3
	Elective I	3
PRJ 360	Project I	1

## Year IV, Semester VIII

Code	Subject	Credits
	Elective III	3
INT 492	Internship	3
PRJ 452	Project II	3

## Electives

### AI and Machine Learning

CMP 458	Artificial Neural Network
CMP 488	Fuzzy Logic with Engineering Application
CMP 442	Human Computer Interaction
CMP 459	Natural Language Processing
	Social Network Analysis
	Computational Linguistics

### Data Analysis and Computing

CMP 428	Big Data Technologies
CMP 489	Bioinformatics
CMP 427	Cloud Computing
CMP 425	Data Mining
CMP 426	Distributed DBMS
CMP 431	Distributed Operating System

	Information Retrieval
CMP 491	Oracle
CMP 419	Parallel Computing
CMP 432	Real Time Operating System
	Computational Biology



AN EXCITING YET  
FLEXIBLE PROFESSION TO  
ENHANCE THE QUALITY  
OF LIFE FOR PEOPLE





# Bachelor of **CIVIL ENGINEERING**

**Bachelor of Civil Engineering (BE Civil)** focuses on professional engineering that deals with the planning, designing, constructing, and maintaining of the physical infrastructure built in the natural environment. The programme deals with the construction of public works or private projects like all sorts of roads, bridges, tunnels, channels, canals, helipads, airports, dams, buildings, parks, or sports complexes. Civil engineering is all about helping people and shaping the world. Clearly, it will continue to play a key role, particularly in the reconstruction of post-quake Nepal.

## Key Learning Outcomes

- Acquire a knowledge of scientific principles & materials in construction engineering and the building sector
- Enable graduates to make objective, technical, and effective decisions in the broad field of Civil Engineering
- Excel in solving problems in teams or independently through skills nurtured by training such as project work or internships
- Engage in lifelong learning & application in areas related to structural, transportational, geo-technical, or environmental engineering, water resources, construction management, disaster risk engineering, and earthquake engineering
- Get the qualifications and confidence to become practising engineers or community leaders in the emerging field of Civil Engineering







## Career Prospects

There are many job opportunities in the public sector, with local authorities, in government departments, and environmental organizations for Civil Engineers.

BE Civil Engineering graduates have fine career prospects in infrastructure construction – buildings, transport, hydropower, and irrigation. This includes bridges, roads, tunnels, dams, and canals. They get work of national or local importance in producing, storing, and distributing electricity, gas, and water.

Civil engineers get worthwhile employment with varied contractors and consultancies, and also work for diverse national and multinational organizations.

## Careers by Area

**Materials Science and Engineering** – Quality Controllers in different projects to ensure quality in construction

**Earthquake Engineering** – Consulting Engineers and Seismic Analysts in construction companies and private or public organizations for public safety

**Environmental Engineering** – Environmentalists in different INGOs, NGOs, and governmental sectors for monitoring

**Geotechnical Engineering** – Consulting Engineers and Geotechnical Engineers or Investigators in INGOs, NGOs, and governmental sectors

**Water Resource Engineering** – Hydrology, Hydropower, or Irrigation Engineers in governmental offices or NGOs or INGOs

**Structural Engineering** – Structural Designers and Analysts for Structural Modeling

**Surveying** – Land Surveyors for Revenue or Land Record Departments and Surveyors for planning and designing projects

**Transportation Engineering** – Consulting or Traffic Engineers and Transportation Planners in road projects, railways, tunneling, and aerodrome construction or maintenance

**Municipal or Urban Engineering** – Urban Planners for holistic development

**Environmental Hydrology and Hydraulic Engineering** – Engineers in hydropower or irrigation projects, governmental offices, NGOs, or INGOs

**Construction Management** – Construction or Project Managers in the governmental or private sector and construction industries

# COURSE STRUCTURE

## Year I, Semester I

Code	Subject	Credits
CHM 110	Applied Chemistry	2
PHY 110	Applied Physics	3
MTH 110	Calculus I	3
ENG 110	Communication Techniques	2
CMP 112	Computer Programming	3
MEC 112	Engineering Drawing	2

## Year II, Semester III

Code	Subject	Credits
ARC 150	Building Technology	2
MTH 210	Calculus II	3
WRE 212	Fluid Mechanics	3
MTH 216	Probability & Statistics	2
STR 216	Strength of Materials	3
CVL 216	Surveying I	3

## Year III, Semester V

Code	Subject	Credits
WRE 310	Engineering Hydrology	2
CBL 318	Estimating & Valuation	3
GTE 310	Foundation Engineering	3
STR 314	Structural Analysis II	3
TRP 310	Transportation Engineering I	3
ENV 310	Water Supply Engineering	3

## Year IV, Semester VII

Code	Subject	Credits
CVL 450	Civil Engineering Project II	3
CVL 412	Construction Project Management	3
STR 352	Design of R.C.C. Structure	3
	Elective II	3
CVL 416	Engineering Professional Practice	2
WRE 410	Hydropower Engineering	3

## Year I, Semester II

Code	Subject	Credits
MTH 150	Algebra & Geometry	3
MEC 150	Applied Mechanics	4
ELE 112	Basic Electrical & Electronics Engineering	3
CVL 110	Civil Engineering Materials	2
CVL 112	Civil Engineering Workshop	1
GTE 150	Engineering Geology	3
MEC 114	Introduction to Energy Engineering	2

## Year II, Semester IV

Code	Subject	Credits
MGT 250	Engineering Economics	3
WRE 250	Hydraulics	3
MTH 252	Numerical Method	2
GTE 252	Soil Mechanics	3
STR 252	Structural Analysis I	3
CVL 252	Surveying II	3

## Year III, Semester VI

Code	Subject	Credits
CVL 350	Civil Engineering Project I	1
STR 214	Concrete Technology & Masonry Structure	3
STR 354	Design of Steel & Timber Structure	3
	Elective I	3
WRE 352	Irrigation & Drainage Engineering	3
ENV 352	Sanitary Engineering	3
CVL 316	Survey Field Project	1
TRP 352	Transportation Engineering II	3

## Year IV, Semester VIII

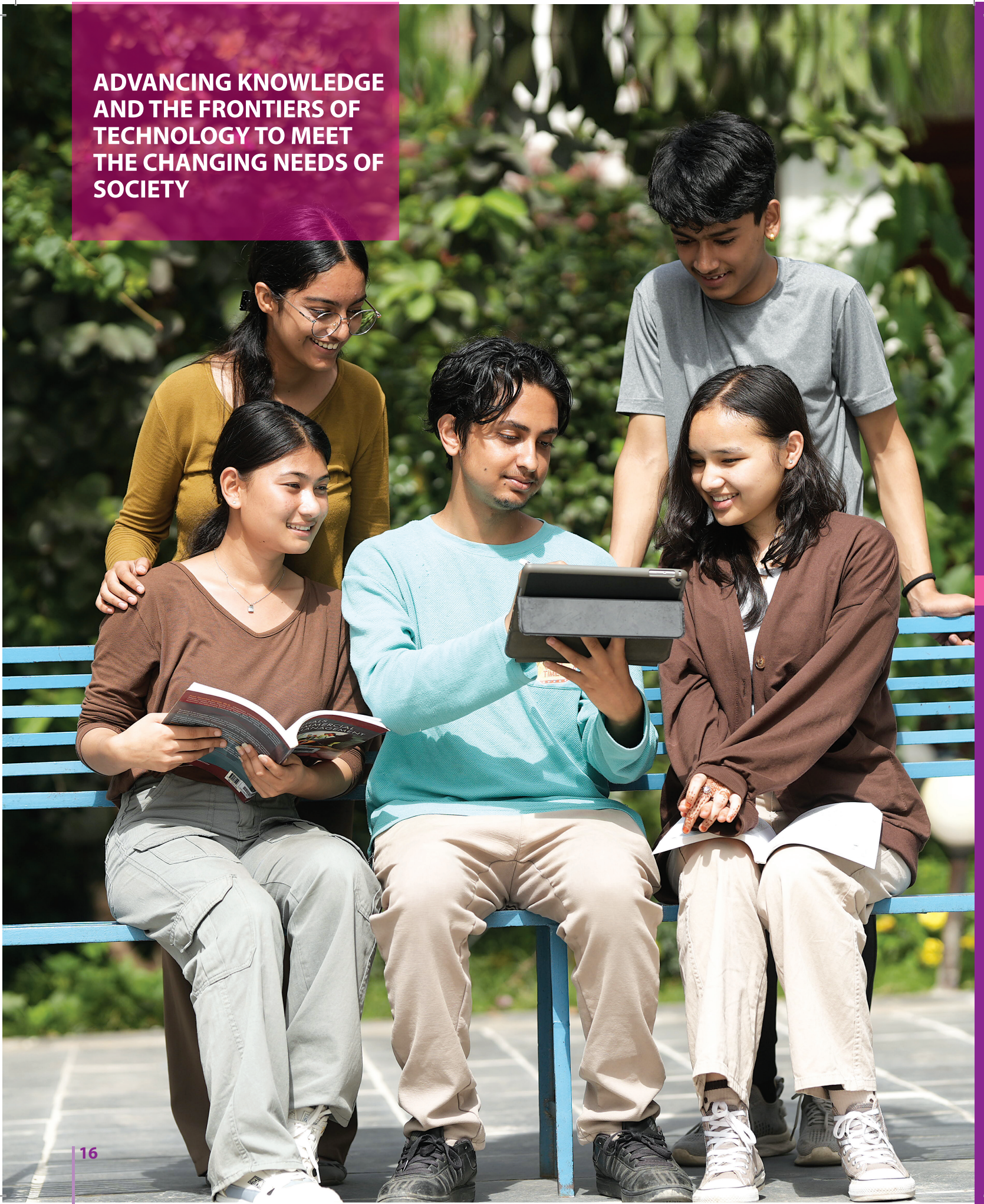
Code	Subject	Credits
	Elective-III	3
INT 484	Internship	6

## Electives

Course Code	Subject
CVL 480	Appropriate Technology
ENV 480	Bio-Engineering
ENV 481	Soil Conservation and Watershed Management
ENV 482	Climate Change
ENV 483	Solid Waste Management
ENV 484	Water Quality Management
ENV 485	Environmental Management System
ENV 486	Public Health and Risk Assessment
ENV 487	Environmental Impact Assessment
GTE 480	Geo-hazard
GTE 481	Advanced Geo-technical Engineering
GTE 482	Geotechnical Exploration & Testing
GTE 484	Rock Engineering
GTE 485	Ground Improvement Techniques
MGT 481	Community Development and PRA
MGT 482	Organization & Management
MGT 483	Post-disaster Water and Sanitation Management
MGT 484	Disaster Risk Management
MGT 485	Construction Safety Management
MGT 486	Procurement Management
MGT 487	Operation Research
MTH 480	Finite Element Methods
MTH 481	Statistical Quality Control
STR 480	Earthquake Resistance Design of Structure
STR 481	Design of RCC Bridge
STR 482	Vulnerability Assessment and Retrofitting Techniques
STR 483	Seismic Risk Assessment
STR 484	Structural Reliability
STR 485	Structural Dynamics
STR 486	Seismic Resistant Design of Masonry Structure
TRP 480	Railway Engineering
TRP 481	Ropeway Engineering
TRP 482	Airport Engineering
TRP 483	Transportation Safety
TRP 484	Traffic Engineering & Management
TRP 485	Rural Road Engineering
TRP 486	Transport Planning
TRP 487	Trail Suspension Bridge
WRE 481	Water and Wastewater Quality Analysis
WRE 482	Hill Irrigation Engineering
WRE 483	Groundwater Engineering
WRE 484	Advanced River Hydrology
WRE 485	River Engineering
WRE 486	Domestic Water and Wastewater Engineering & Management
WRE 487	Micro-hydropower System
WRE 488	Hydropower Planning and Development



**ADVANCING KNOWLEDGE  
AND THE FRONTIERS OF  
TECHNOLOGY TO MEET  
THE CHANGING NEEDS OF  
SOCIETY**





# Bachelor of Engineering in **INFORMATION TECHNOLOGY**

**Bachelor of Engineering in Information Technology (BE IT)** is a unique blend of Information and Communication Technology. It prepares students to function effectively in this dynamic technological era. The programme focuses on applying cutting edge technologies for the socioeconomic development of the nation. It is perfectly designed to meet the needs of an ever-growing Information and Communication Technology industry here or abroad. The degree produces highly qualified ICT professionals in hardware, software, networking, and communication technology for the digital future.

## Key Learning Outcomes

- Analyze, design and develop software or computer systems and design secure networks & monitor them to handle data and information worldwide
- Enable the automation of organizational tasks through computers & telecommunications equipment to improve efficiency
- Gain specialization in the configuration, integration, development, and testing of systems and networks to meet industrial needs
- Resolve system-related issues and troubleshoot communication & networking problems to ensure smooth operation
- Acquire skills and expertise in intelligent information retrieval systems to benefit decision-making bodies in an organization





## Career Prospects

Excellent job prospects! More and more jobs are being created in an increasingly IT-driven world. Associated career trends show the fastest growing occupations in Nepal and abroad.

Empowers graduates to handle computer and IT-related tasks independently throughout their careers. They also have tremendous possibilities and opportunities of starting their own ventures.

IT engineers get suitable jobs such as System Analysts, System Designers, Project Managers, Business Analysts, OS Developers, Database Analysts, Information System Experts, Digital Media Specialists, Network Specialists, Software Engineers, or Technical Support Representatives.

## Careers by Area

**Information Management** – IT Managers in government, the private sector, NGOs and INGOs

**Telecommunication** – Information & Communication Engineers in telecom companies

**Software Engineering** – Database Administrators, and Software Project Managers in software companies

**System Engineering** – System Engineers in IT-based organizations

**Knowledge Engineering** – Information Systems Experts for big data repositories and information systems

**Networking** – Network Engineers for managing secure networked communication

**Artificial Intelligence** – Developers of computer-based expert systems that mimic human behaviour, learning, and reasoning abilities

**IOT and IT security** – IoT Engineers implement robust security measures, such as authentication protocols, encryption techniques, and access controls, to safeguard sensitive data and prevent unauthorized access



# COURSE STRUCTURE

## Year I, Semester I

Code	Subject	Credits
MTH 110	Calculus I	3
ELX 120	Electronics Device & Circuits	3
CMP 124	Programming in C	3
ELE 120	Basic Electrical Engineering	3
PHY 110	Applied Physics	3
MTH 120	Problem Solving Techniques	3

## Year II, Semester III

Code	Subject	Credits
MTH 210	Calculus II	3
CMP 160	Data Structure & Algorithm	3
CMP 230	Software Engineering Fundamentals	3
MTH 216	Probability & Statistics	2
ELE 172	Instrumentation	3
CMP 228	Advanced Programming with Java	3

## Year III, Semester V

Code	Subject	Credits
CMP 234	Computer Graphics	3
MTH 242	Numerical Methods	2
CMP 270	Research Fundamentals	2
CMP 328	IT Architecture	3
CMM 333	Multimedia System	2
CMM 320	Signal, System and Processing	3
MGT 332	Entrepreneurship and Professional Practice	2

## Year IV, Semester VII

Code	Subject	Credits
CMP 432	Intelligent System	3
CMP 428	ICT Project Management	3
	Elective II	3
MGT 250	Engineering Economics	3
CMP 444	Information System	3
CMP 434	IT System Security	3

## Electives

### Network & Security

	Advance Networking with IPV6	CMP 438	Network Security
CMP 440	Computer Network Programming		Network & System Administration
	Cryptography		Blockchain Technology
CMP 487	Internet Technology		Digital Forensics
CMP 439	Internet, Intranet & Applications		
CMP 437	IP Switching & Routing		

### Communication

CMM 474	Aeronautical Communication	CMM 478	Next Generation Wireless Communication
CMM 472	CDMA Technology	CMM 476	Satellite Communication
CMM 473	Cellular Mobile Communication	CMM 477	Spread Spectrum & CDMA
CMM 443	Digital Communication Techniques	CMM 422	Wireless communication Technology
CMM 471	GSM Cellular Mobile Communication System		Aeronautical Informatics
CMM 475	Optical Fiber Communication		

## Year I, Semester II

Code	Subject	Credits
MTH 150	Algebra & Geometry	3
CMP 162	Object Oriented Programming in C++	3
MEC 116	Basic Engineering Drawing	1
CMP 116	Discrete Structure	3
ELX 172	Digital Logic	3
ENG 110	Communication Technique	2
CMP 122	Computer Workshop	1

## Year II, Semester IV

Code	Subject	Credits
MTH 250	Applied Mathematics	3
ELX 176	Microprocessor and Computer Architecture	3
CMP 268	System Administration and IT Infrastructure Services	2
CMP 168	Web Technology	3
CMP 222	Database Management System	3
CMP 266	Applied Operating System	3

## Year III, Semester VI

Code	Subject	Credits
CMP 370	Internet of Things	2
CMP 344	Computer Network	3
CMP 360	Data Science and Analytics	3
CMM 220	Data Communication	3
	Elective	3
MGT 320	Engineering Management	2
PRJ 360	Project I	1

## Year IV, Semester VIII

Code	Subject	Credits
	Elective III	3
INT 494	Internship	3
PRJ 452	Project II	3



**TOP SOFTWARE  
PROFESSIONALS READILY  
EMPLOYABLE BY THE  
INDUSTRY & RESEARCH  
ORGANIZATIONS**





# Bachelor of **SOFTWARE ENGINEERING**

**Bachelor of Software Engineering (BE Software)** focuses exclusively on the Software Development Process. The programme builds high-level technical skills and professional expertise in students. It provides knowledge of cutting-edge technology and helps them acquire the methods, techniques, and tools of contemporary software engineering to cater fully to the demands of the Software and IT Industry.

## Key Learning Outcomes

- Gain specialization in Software Production to analyze, design, program, test, and maintain software systems
- Utilize ultra-modern computer-aided software engineering tools based on an object-oriented software development approach to build robust software
- Get knowledge of recent developments like Big Data Technologies and Cloud Computing to deal with emerging trends in IT
- Develop applications involving multimedia, mobile, network and web-based systems to design effective human-computer interaction
- Acquire skills and expertise in decision support systems to benefit decision-making bodies in an organization





## Career Prospects

This has great job prospects! Many jobs get created in an increasingly IT-driven world. Career trends show the fastest growing occupations everywhere.

Empowers graduates to handle software and IT related tasks independently throughout their careers. Further, they have great possibilities of starting their own ventures.

Software Engineers get suitable jobs such as Software & Quality Control Engineers, Development Managers, Applications Programmers, Analysts, Consultants, Software Architects, or Software Innovators.

## Careers by Area

**Software Development** – Software Engineers in software-related companies

**Web & Internet Programming** – Web Engineers processing interactive web-based applications based on high-end programming technology

**Information Management** – Information Systems Experts designing and implementing information systems to assist decision-making

**Distributed & Cloud Computing** – Software Engineers supervising distributed environments and cloud computing

**Software Quality Assurance Engineer** – A software quality assurance (SQA) engineer is responsible for ensuring that software products are developed and released with the highest level of quality possible

**Product Engineering** – Product Engineering is the process of innovating, designing, developing, testing and deploying a software product

# COURSE STRUCTURE

## Year I, Semester I

Code	Subject	Credits
MTH 110	Calculus I	3
MEC 116	Basic Engineering Drawing	1
CMP 116	Discrete Structure	3
ELX 110	Digital Logic	3
CMP 124	Programming in C	3
MTH 120	Problem Solving Techniques	3
CMP 122	Computer Workshop	1

## Year II, Semester III

Code	Subject	Credits
MTH 210	Calculus II	3
CMP 222	Database Management System	3
CMP 160	Data Structure & Algorithm	3
MTH 216	Probability & Statistics	2
CMP 228	Advanced Programming with Java	3
CMP 230	Software Engineering Fundamentals	3

## Year III, Semester V

Code	Subject	Credits
CMP 226	Applied Operating System	3
CMP 334	Computer Network	3
CMP 338	Simulation & Modeling	3
CMP 340	Software Design & Architecture	3
CMM 342	Artificial Intelligence & Neural Network	3
CMM 336	Data Science & Machine Learning	3

## Year IV, Semester VII

Code	Subject	Credits
	Software Project Management	3
CMP 442	Distributed System & Cloud Computing	3
CMP 440	Software Testing, Verification, Validation & Quality	3
	Elective	3
CMP 438	Entrepreneurship & Professional Practice	2
	Engineering Economics	3

## Year I, Semester II

Code	Subject	Credits
MTH 150	Algebra & Geometry	3
ELX 176	Microprocessor & Computer Architecture	3
PHY 110	Applied Physics	3
ENG 110	Communication Technique	2
CMP 162	Object Oriented Programming in C++	3
CMP 168	Web Technology	3

## Year II, Semester IV

Code	Subject	Credits
CMP 274	Computer Graphics & Multimedia	3
CMP 280	System Programming	3
MTH 252	Numerical Methods	2
CMP 272	Analysis & Design of Algorithms	3
CMP 278	Object Oriented Design & Modeling Using UML	3
CMP 270	Research Fundamentals	2

## Year III, Semester VI

Code	Subject	Credits
CMP 376	Agile Software Development	3
MGT 320	Engineering Management	2
CMP 382	Software Dependability	3
	Elective I	3
PRJ 360	Project I	1
CMP 378	Cloud Application Development Foundation	3
CMP 380	Network Programming	3

## Year IV, Semester VIII

Code	Subject	Credits
	Elective III	3
INT 469	Internship	3
PRJ 452	Project II	3

## Electives

### Software Development & programming

CMP 416	.NET Technologies
CMP 417	Advance Java
CMP 429	Compiler Design
CMP 422	Formal Methods in Software Engineering
CMP 411	Mobile Apps Development

CMP 485	Web Services & Applications
CMP 418	Advanced Web Technology
MTH 481	Statistical Quality Control

### Application

CMP 413	e-Commerce	CMP 412	Management Information System
MGT 421	Engineering Entrepreneurship	CMP 486	Mobile Computing
ENV 487	Environmental Impact Assessment		
CMP 423	ERP		
CMP 424	Geographic Information System		



**DEALING WITH REAL-  
LIFE CHALLENGES IN  
THE ELECTRONICS  
AND COMMUNICATION  
INDUSTRY**





Bachelor of

# ELECTRONICS AND COMMUNICATION ENGINEERING

## Bachelor of Electronics and Communication Engineering (BE Electronics & Communication)

focuses on Electronics and Communication Technology alongside electronic hardware and communications systems. The programme covers a wide range of application areas having a direct effect on daily life. The programme enables students to solve problems confidently through their knowledge and skills. This helps to develop highly qualified Electronic & Communication Engineers alongside development in electronics and audio & video communication systems. Automation in industries and various sectors has made an Electronic Engineer a catalyst for the change of modern society.

## Key Learning Outcomes

- Gain knowledge of analog & digital hardware to design, install, establish, and monitor communication systems
- Specialize in guided or unguided networking technologies to manage the existing systems and optimize their use
- Enable conceptualizing, designing, and developing electronic products, systems, services, & processes to improve functionality and reliability
- Acquire hardware essentials of robotics & automation and power electronics to support industrial plants, medical facilities, security operations or the defense industry
- Resolve system-related issues and problems relating to electronic devices & communications to ensure smooth operation





## Career Prospects

Ever-increasing job prospects! BE Electronics and Communication Engineers have many opportunities to work in the diversified, highly competitive and fast-changing fields of electronics and communication engineering in Nepal or elsewhere.

These engineers get suitable jobs such as Telecom Engineers, Network Administrators, Robot Designers, or Technical Support Representatives.

## Careers by Area

**Telecommunication** – Telecom Engineers in mobile & telecom companies or vendors

**Network Administration** – Network Administrators in various organizations

**Robotics** – Robot Designers in companies and military or security services

**Embedded Systems** – Experts in companies that design, develop and maintain consumer electronic devices and communication systems

**Biomedical Instrumentation** – Electronics Engineers to monitor biomedical instruments for health-care institutions or hospitals

**Telemedicine** – Electronic Engineers for facilitating electronic processes for online medical consultation

**VLSI** – Electronics engineers in semiconductor, IC fabrication, and chip design companies

**Research** – Research workers in key areas like satellite communication, mobile & wireless communication, sensor networks, digital & analog signal processing, semiconductor technology, robotics, and nanotechnology



# COURSE STRUCTURE

## Year I, Semester I

Code	Subject	Credits
PHY 110	Applied Physics	3
ELE 130	Basic Electrical Circuits	3
MTH 110	Calculus I	3
CMP 112	Computer Programming	3
ELE 132	Electrical Installation Practice & Safety	2
MEC 116	Basic Engineering Drawing	1
MEC 136	Engineering Workshop	1

## Year II, Semester III

Code	Subject	Credits
MTH 210	Calculus II	3
CMP 160	Data Structure & Algorithms	3
ELX 110	Digital Logic	3
ELX 234	Electromagnetic Fields & Waves	3
ELX 232	Electronic Circuits	3
ELE 172	Instrumentation	3

## Year III, Semester V

Code	Subject	Credits
CMP 346	Artificial Intelligence	3
CMP 324	Computer Organization & Architecture	3
MGT 250	Engineering Economics	3
ELX 332	IOT & Sensor Technology	3
ELE 338	Research Methodology	2
ELX 330	Signals & System	3

## Year IV, Semester VII

Code	Subject	Credits
CMM 422	Digital Signal Processing	3
	Elective II	3
ELX 434	Electromagnetic Propagation & Antenna	3
MGT 320	Engineering Management	3
CMM 424	Telecommunication & Network Security	3
CMM 426	Wireless Communication Technology	3

## Year I, Semester II

Code	Subject	Credits
MTH 150	Algebra & Geometry	3
ENG 110	Communication Techniques	2
ELX 174	Electronic Devices	3
ELE 178	Network Theory	3
CMP 164	Object Oriented Programming with JAVA	3
ELX 180	Semiconductor Material	2

## Year II, Semester IV

Code	Subject	Credits
MTH 250	Applied Mathematics	3
CMP 234	Computer Graphics	3
CMP 222	Database Management System	3
ELE 276	Electrical Machine & Control	3
ELX 270	Microprocessors	3
MTH 252	Numerical Methods	3

## Year III, Semester VI

Code	Subject	Credits
CMM 380	Analog & Digital Communication	3
CMM 382	Data Communication & Computer Network	3
ELX 372	Digital System Design	2
	Elective-I	3
ELX 320	Embedded System	3
MTH 216	Probability & Statistics	3

## Year IV, Semester VIII

Code	Subject	Credits
	Elective III	3
INT 490	Internship	3
PRJ 452	Major Project	3

## Electives

### Electrical

ELE 450	Electric Energy System Management
ELE 455	Electrical Drives
ELE 451	Micro Hydro Power
ELE 456	Power System Reliability
ELE 421	Programmable Logic Controller
ELE 452	Rural Electrification
ELE 453	SCADA

ELE 454	Solar Photovoltaic Technology
ELX 475	Technology System Design
ELX 473	VLSI Design
	Flexible AC Transmission
	Power System Simulation & Modling

### Electronics

ELX 474	Biomedical Instrumentation
ELX 476	Mechatronics
ELX 431	Microprocessor System & Interfacing
ELX 471	Microwaves Devices
	Green Innovation
ELX 472	Principles of Robotics & Modeling
	Technology System Design







# Infrastructure & Campus

## Learning at NCIT

### College Building

NCIT has purposeful spacious academic buildings with abundant amenities. The construction is structurally sound and made with a view to run this educational institution effectively. There is enough space for wide-ranging activities and large classrooms for a flexible learning environment. The College also has a big library, seminar halls, and faculty & administrative offices for plentiful study opportunities or requirements.

### The Premises

The College grounds are fairly large and contain sports facilities like basketball, badminton, and table tennis. They are used for multifarious College events or other important outdoor purposes. Our premises are wide, open, clean and fresh with pleasing flowers.

### Ideal Location

NCIT is well situated in a serene and lush spot in a central part of Kathmandu valley. This makes our city campus easily accessible and saves students' time, money, and energy while commuting shorter distances to and fro their classes or games here. We offer an ideally located, model campus with modern classrooms and quiet study areas to all our current or prospective students.

### Laboratories

Our state-of-the-art laboratories are fully equipped according to the norms & standards of the Nepal Engineering Council. The College has the following laboratories:

**General Labs:** Physics, Chemistry, Communication Techniques, Thermal Science, Basic Electrical Engineering, and Basic Electronics Engineering

**Computer, IT & Software:** Basic Computer Laboratory, Programming Laboratory, Advanced Laboratory, and Hardware / Maintenance Internet Connectivity

**Civil:** Civil Engineering Materials and Concrete Technology, Strength of Materials, Hydraulics, Fluid Mechanics & Hydrology, Surveying Store, Analysis of Structure, Soil Mechanics & Geo-Technical Engineering, Transportation Engineering, Environmental Engineering, Structural Engineering, and Engineering Geology in Hydropower

**Electronics & Communication:** Basic Electronics Lab, Advanced Electronics, Electromagnetics & Microwave, Communication Engineering, Microprocessor and Computer Organization, PCB Laboratory, and Project Work Laboratory





**Prof. Prem Narayan Aryal, PhD**  
Vice Chancellor, Pokhara University  
Interacting with NCIT students





# High-Quality Education

## Pursuing Engineering Excellence

### Dedicated Faculty

NCIT's dedicated and experienced engineering faculty delivers excellent teaching-learning. Our faculty is hand-picked from professionals with experience in the industry and expertise in their fields who have engaged in innovative, high impact basic and applied research across the broad discipline of engineering through knowledge exchange. They are committed to nurture a generation of engineers with the skill-sets to be more innovative, entrepreneurially-focused, and competitive. Our group of tutors supervises academic performance, interacts with students, and gives needed generic & personalized guidance.

### Vibrant Teaching-Learning

Our teaching-learning approach is reflected in on-campus studies, with students making the most of their academic experience. Fully supporting students' aspirations, the College is a centre for learning where they can prosper in a supportive, encouraging, and motivational environment. We focus on preparing students for both employment and further studies or research, placing emphasis on knowledge that has application in a multitude of professions. Students are encouraged to participate actively in the learning process while their professors utilize numerous state-of-the-art and innovative techniques to attain a beneficial and practical learning environment.

### Standard Assessment

Our academic evaluation process is based on the learning outcome assessment of each student. We hold that such assessment and academic performance are interrelated and best proven through examination results. Exams are used for assessing the students in an internationally competitive arena whereby a full insight into each student's attained knowledge and capabilities is gained. NCIT also has other ways of examining & assessing how students learn and progress in their studies.

### Laboratory Work

The College offers an exceptional combination of science and engineering facilities, particularly laboratories & workshops, for nurturing innovative skills in teaching, learning, and research. We arrange sufficient practicals to meet syllabi standards and students' hands-on learning needs. Through the synergy of various science and engineering units, NCIT provides an interdisciplinary approach that helps its high-standard learning environment. Practical laboratory sessions, to support courses in science, applied science & technology, are arranged according to course needs.

### Effective Tutorials

NCIT's well-designed tutorial system truly improves the academic performance of students over the semester. This is a unique scholastic opportunity at the College to get individual attention and indispensable support to learn better. The College organizes extra tutorials throughout the academic session. These intensive tutorial classes are arranged on the basis of an attending student's proficiency, need, or request. The purpose of tutorials is to develop a deep understanding of the topics introduced in lectures and to apply the knowledge acquired to solve problems.

### Project Work & Research

NCIT provides students with ample opportunities to integrate their coursework knowledge with professional applications by project work & research. These are important learning activities for students who intend to pursue higher degrees or gain workplace skills. They can benefit from assistance & supervision in carrying out tasks associated with project & research work since such work departs somewhat from the usual pattern of graduate teaching. Students acquire the ability to manage research projects in an independent manner.





# Get Knowledge & Skills

## Utilizing Study Opportunities

### **An Extra Edge**

Vital non-credit inputs supplement the regular BE programs as they meet the diverse learning needs of students and improve their employability. Moreover, these additional inputs build technical competencies, problem-solving abilities, and managerial skills.

### **Advancement Courses**

Non-credit courses cover latest and important computer, IT, and other technological developments. Students can thereby adjust to rapid changes in these fields and update their knowledge.

### **Add-On Certifications**

Internationally recognized certifications are offered from renowned institutions through related-training and preparatory examinations. They bridge the gap between the allocated curriculum and an ever-evolving industry.

### **Professional Development**

We develop students professionally through training sessions, workshops, and internships. These deal with practical experience, time management, self-management, corporate dressing, interpersonal skills, and social etiquette.

### **Corporate Interaction**

Eminent professionals give lectures and presentations on diverse, useful topics. To further interaction, students of all branches go on industrial trips at least once a year.

### **Field Visits & Internships**

The College emphasizes a specified number of field visits for professional experience and implements the stipulation pertaining to internships for a particular degree.

### **Industrial Tie-Ups**

NCIT has tie-ups with top industries and IT-related business houses or even international companies for curriculum development, collaborative & applied research, knowledge exchange and skills transfer to our faculty, staff, and, importantly, students.

### **Placement Support**

The Placement Cell supports graduates in finding the right kind of job environment here or abroad. This Office also helps them prepare documents & CVs and face interviews.

### **Entrepreneurship Cells**

The Entrepreneurship Cell at NCIT aims at manifesting the latent entrepreneurial spirit of young students. The Cell hosts various workshops, speaker sessions, innovative games and competitions for aspiring entrepreneurs and supports them.

### **Research, Training and Placements**

NCIT's Research, Training and Placement Unit organizes valuable training for its graduates. Such training relates to Operating Systems Designs, Embedded System Designs & Web Development.



## Organizational Partners

### Learn Today – Apply Tomorrow

At NCIT, the impetus behind our teaching-learning is its relevance to industry human resource needs. To achieve this, the College forges linkages and partnerships with established organizations:

- Social Aves
- Nepflights.com
- Codyssey Web Nepal
- Mercantile Traders
- Professional Computer System (PCS)
- Ncom Services
- Midas Technologies
- Young Innovations
- Drylce Solutions
- Upveda Technology
- Microsoft Innovation Centre (MIC) Nepal
- Smart Solution
- Ultrabyte International
- Deerwalk Service
- Web World Nepal
- ICON SOFT
- HighTech Valley
- Wesleyan Team
- Spiralogic international
- Young Minds Creation (P)Ltd.
- IMAC Engineering Co., Ltd

### Authorized Academic Partner

NCIT is an authorized academic partner of world-renowned training institutes like CISCO system or Check Point and AWS Academy that offer all-inclusive professional activities.



### Membership

NCIT is registered as a Member of APNIC. APNIC (the Asia-Pacific Network Information Centre) is the Regional Internet address Registry (RIR) for the Asia-Pacific region. It is one of the world's five RIRs and is part of the Number Resource Organization.





**Prof Deepak Bahadur Bhandari, PhD**  
Registrar, Pokhara University  
Overseeing NCIT students' presentations





# Cutting-Edge Facilities

## Benefitting from Resources

### Library

NCIT has a spacious library of over 33,000 books including textbooks, reference, research & project reports, and audio-visual materials. Online access to international library networks and latest top journals, magazines, and newspapers is available. The library timing is 7:00am–8:30pm, Sunday to Friday, for students to be able to do long study.

### ICT

NCIT has a networked environment with a centrally located ICT – Information Communication Technology – Centre with uninterrupted internet connectivity and free WIFI. The College also has state-of-the-art computer labs to encourage e-learning and to enhance computer skills so necessary in the contemporary knowledge socio-economy.

### Canteen

The College has a fine canteen for students and employees in its premises. At NCIT, the food and beverage (including free drinking water) quality is checked carefully – periodically or randomly and physically or scientifically. We ensure that all food items are fresh, clean, nutritious, chemical or pest-free, and as affordable as feasible.

### Virtual Classes & Conferences

NCIT provides Virtual Classes for lectures, assignments, tutorials & note taking. These help learning better through digital inputs & outputs and greatly reinforce classroom teaching & self-study. Conference halls facilitate organizing lectures and conferences that are regular events on the campus. The halls are equipped with the latest educational technology for webinars and online workshops.

### Project Labs

NCIT has top-class labs for project work & research. Students can put their theoretical knowledge to use and learn to work independently. Modern equipment allows students to apply theory and to do research.





# Be Involved

Life at NCIT

## Extracurricular Activities

We believe ECAs play a rather meaningful role in a student's education and life. NCIT's extracurricular activities are indeed a vibrant side of its campus life making students fit in body, mind, and spirit to take on the challenges of the 21st century.

### Clubs

The College has many stimulating clubs for the students' diverse areas of interest. NCIT clubs regale and refresh our hard working students and provide them a full college experience and a healthy psychological outlet.

### Social Service

NCIT motivates its youngsters to serve society in as many ways as they possibly can. Many of our students volunteer for blood donation, public health awareness, sanitation programmes, and natural calamity relief.

### Games & Sports

The College has many games and sports including basketball, badminton, and table tennis. We also hold many intra- and inter-college competitions or friendly matches to increase players' participation and to inspire them to perform better and better.







## Co-Curricular Activities

CCAs at NCIT certainly enrich students' lives by developing their personalities and academic profiles through productive engagement. The College has varied co-curricular activities that galvanize our youngsters to do even better in studies and stay ahead of others.

### Seminars & Workshops

The College organizes frequent seminars and workshops to inform students about engineering and applied science. These occasions are about specific subject areas and have an interactive environment for students to learn from experts and orientate themselves.

## Nepal Open Source Klub

Nepal Open Source Klub – NOSK – has been successfully creating technical awareness and sharing knowledge of new technologies, software, and web development. It was established on 28th February, 2008, by our students who were enthusiastic about FOSS (free and open-source software) formerly as the NCIT Open Source Klub.

## Publications

NCIT regularly publishes newsletters, magazines and journals managed by students. Their articles go a long way in making such productive output interesting and memorable apart from fostering students' creative & technical skills.

## Professional Competitions

The College organizes numerous competitions to promote engineering & technology. These include different kinds of activities such as project competitions, emerging engineering & technology talks, training camps, and exhibitions.

## Robotics and Automation Centre

NCIT Robotics and Automation Centre (formerly the NCIT Robotics Club) has encouraged student participation in different robotic and electronic activities at the College and outside. The Club was established in 2003 with the aim to use the theoretical knowledge of our students in practical projects.



**Prof Rajesh Thagurathi**

Dean, Faculty of Science & Technology, Pokhara University  
Delivering Keynote Speech at NCIT Technopreneurship Programme





# Be a Part of Our Tradition

## Collaborating with Friends

### Alumni Association

The NCIT Alumni Association – NASSO – was set up in 2005 with the aim to keep in touch with all the graduates of the College and interact with them on a regular basis so as to help our current students learn from their seniors whether studying or working or both in different parts of the world. Our alumni assist us in forging relationships with professional institutions all over the globe for the betterment of the institution and its students.

### Free Students' Union

The Free Students' Union – FSU – is a key student body at NCIT that greatly helps in maintaining a harmonious study environment and in promoting professional activities among our keen learners. The FSU goes a long way in bringing students from different departments at NCIT together and building up relationships that enhance their academic performance. It also assists in resolving disputes between students or misunderstandings, if any, with the management.

### Conferences

NCIT students show tremendous organizational abilities as can be seen in their managing national or even international events. One of such events was the NaSCoIT – National Students' on Information Technology – Conference, 2013, an international IT conference on ICT for Glocalization.

### Interactive Platform

NCIT's community of teachers and students discusses subject matters, projects, and activities across a wide network of relationships. The College also maintains close relationships with national & international universities and related bodies for stimulating intellectual enquiry. Representatives from various institutions provide useful information about educational and career prospects or career-related issues.

### Enriching Events

The College celebrates its campus life through annual events that unite and energize its students (and even alumni). Welcome & Orientation programmes and Award & Graduation ceremonies add depth and texture to the NCIT experience. Students make lasting friendships and enrich their thinking.







# Get Scholarships

**Supporting Your Education**

## **PU Scholarships**

The College provides scholarships to deserving students as per PU guidelines. 10% students of the annual intake are provided full scholarships (except the expenses towards surveying and field visits).

## **NCIT Scholarships**

The College provides scholarships based on a student's GPA in +2 / equivalent and the merit list of the NCIT Entrance Test.

## **Performance based Scholarships**

The College awards full Semester Fee waiver to students who achieve SGPA 4 in any Semester.

NCIT also awards class toppers and second toppers.

# Admission Process

## Shaping Your Future

### Eligibility

Applicants need minimum C Grade or 45% marks (for A Levels, minimum D Grade) in Physics, Chemistry and Math. Biology group students (without Mathematics) are also eligible to apply.

### Application Form

Forms for admission are available at the NCIT office or online at [www.ncit.edu.np](http://www.ncit.edu.np).

### Entrance Test

NCIT conducts its own Entrance Test which is mandatory for admission and assesses areas in Math, Physics, Chemistry & English.

### Results

Results are strictly based on the order of merit and published the same day & made available on the Notice Board and at: [www.ncit.edu.np](http://www.ncit.edu.np).

### Admission Counselling

Applicants who have cleared the Entrance Test are invited for the Admission Counseling.

### Offer of Admission & Acceptance

Selected Applicants are handed Offer Letters for admission.

### Enrollment

Successful Applicants shall be enrolled as NCIT students on completing this process.

Admission Forms  
can also be submitted  
**ONLINE**  
at

[www.ncit.edu.np](http://www.ncit.edu.np)





# Students' Corner

## University Toppers



We learn how to talk to computers in their language to make them do what we want wherever! That's why I chose Computer Engineering at NCIT. Diving into digital logic secrets, I uncover computer magic . . .

**Riya Pant**  
BE Computer, *SGPA 4.0*



NCIT is a promising institution for aspiring computer engineering professionals. Focusing on a well-structured curriculum, their dedicated teachers expand the technical knowledge and problem-solving skills of students. Personally, studying here has been a valuable experience.

**Barnnita Shrestha**  
BE Computer, *SGPA 4.0*



This institution is the best place for you to thrive in your career and life. NCIT's environment is purely professional and enchantingly innovative. Its educators provide beneficial guidance and foster required skills in every student.

**Bishal Poudel**  
BE Computer, *SGPA 4.0*



Best for high-tech students, NCIT focuses on new technology enhancing student careers. They provide key programs alongside professional training. Joining here is the best decision of my life: It's a pleasure to be its member.

**Narendra Chaudhary**  
BE Computer, *SGPA 4.0*



Making students well-developed, market-ready professionals is what makes NCIT so great! The milieu of the College is ideal for independent learning, practical participation, peer networking, and technical self-sufficiency. I'm really fortunate to be an NCITian!

**Sabhyata Subedi**  
BE Civil, *SGPA 4.0*



Project-based education with mentorship prepares students for meeting career challenges. Here, we learn much from experienced, specialist, and supportive teachers reinforced by operational programs, field visits, and institutional collaboration. My gratitude to NCIT's innovative group!

**Arjun Bhandari**  
BE Civil, *SGPA 4.0*



NCIT's pragmatic education substantially helps us to excel in our jobs-to-be. It, assuredly, is an institution where you can explore, learn, and grow simultaneously.

Its efficiency, intellectuality, vibrancy, and care modelled my dreams into reality.

**Ayush Phuyal**  
BE Civil, *SGPA 4.0*



Accessible educators, at NCIT, readily assist students in their professional journey or personal concerns . . . Theoretically and practically, their coursework is well-designed. It's my privilege to be a part of the NCIT family of evident achievers!

**Bidhya Sapkota**  
BE Civil, *SGPA 4.0*



Studying at NCIT is an incredible voyage making us competitive, adaptable professionals in an ever-evolving, demanding technological market. Its dedicated faculty and comprehensive curriculum foster theoretical knowledge alongside practical skills. It shaped my career aspirations.

**Raaz Gupta**  
BE IT, *SGPA 4.0*



Every NCIT student journeys across the exciting realm of Information Technology. The College is an energetic tapestry of talent. Here, theory seamlessly merges with hands-on practice as educators and students weave their fabric of progress.

**Thomas Basyal**  
BE IT, *SGPA 4.0*



Learning at NCIT builds up competencies directly applicable to the real world. Their ardent expert educators provide hands-on experience and far-reaching personalized guidance. My understanding of IT concepts deepened, and I developed crucial interpersonal skills.

**Yubraj Adhikari**  
BE IT, *SGPA 4.0*



This is an institution which instills a passion for original, productive technology. They impart deep knowledge and practical insights invaluable in understanding the complex IT field. They encourage students to explore areas governed by IT.

**Salma Tamang**  
BE IT, *SGPA 4.0*



As an NCIT graduate, I'd confidently utilize the valuable skills and professional connections I've gained for others. Diverse experience and elevating learning define this premier college. My time here has been transformative, academically and personally.

**Pratik Bhandari**  
BE SE, *SGPA 4.0*



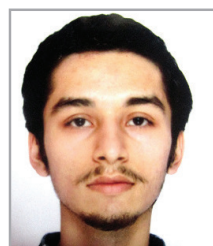
The brilliant NCIT community thrives in a unique environment promoting top professionalism. The institution values differing but positive perspectives. This is a place where our voices matter and where we hone our knowledge & skills.

**Nikesh Gamal**  
BE SE, *SGPA 4.0*



NCIT has an ideal setting for a fruitful collegiate experience leading to a distinguished career. Its well-rounded education, practical approach, cutting-edge labs, and wealth of resources matter. Studying here gives students a crucial competitive advantage.

**Sugam Acharya**  
BE SE, *SGPA 4.0*



NCIT has a fantastic tech outreach stemming from the legacy of its remarkable well-placed alumni. This attracts fine minds across the nation. Its many opportunities help budding professionals like me quickly transcend their own limitations.

**Prasiddha Acharya**  
BE SE, *SGPA 4.0*



# HoD Message



Computer engineering integrates computer science and electronics engineering to develop hardware and software. This domain focuses on the working of computer systems and their oneness. Working with devices and systems, computer engineers use the principles of basic science and mathematics to solve computing problems and design needed solutions.

NCIT's Computer Engineering Department offers a sophisticated learning environment run by top, dedicated teaching professionals alongside proficient administrators. We engage students in varied training, seminars, and workshops to foster knowledge & skills.

**Er Resha Deo**  
Computer Engineering



Civil Engineering inculcates vital analytical and experimental skills in transportation engineering, structural engineering, surveying, urban engineering, water resource engineering, or geotechnical engineering. This knowledge enables value-driven students to serve the local and global arenas. It also paves the way for glittering careers in the areas of their expertise.

NCIT's Department of Civil Engineering has state-of-the-art laboratories, proven faculty members, and supportive staff. It is committed to imparting up-to-date education through elective courses, seminars, training, workshops, field visits, and survey camps.

**Er Mani Poudel**  
Civil Engineering



Information Technology (IT) plays a crucial social, economic, and political role. It affects all public or private and local or global sectors whether in education, agriculture, medicine, industry, or research. Directly or indirectly influencing our daily lives, IT is now a demanding yet rewarding profession in our world.

NCIT's IT Department prepares students for professional positions in this exciting field, growing into leaders, or pursuing research. We empower them with the latest knowledge and technical skills of ever-evolving associated technologies.

**Er Madan Kadariya**  
Information Technology



Software Engineering is the systematic application of scientific and technological knowledge, methods, and experience to the design, implementation, testing, and documentation of software. It combines high-quality education with practical experience bridging gaps between universities and the industry. It instills technical expertise for designing, developing, and maintaining software systems.

NCIT's Department of Software Engineering strives to make its graduates grow into versatile software engineers. It does this by strengthening their innovative skills and understanding of high-level languages and system-level programming.

**Er Birendra Bista**  
Software Engineering



**Mr. Samundra Poudel**  
Focal Person, NITI

Nepal College of Information Technology (NCIT) initiated the Nepal IT Incubator (NITI) programme to develop a start-up ecosystem in the core areas of Information Technology by creating an institutional mechanism to support young entrepreneurs, and their start-ups, in the IT industry.

NCIT alumni and students hereby aim to transform innovative ideas into viable enterprises.

- Support ideas and early-stage innovations so that they can mature into tangible and commercially viable businesses and market-ready products: goods or services
- State-of-the-art facilities to provide a platform for product development, evaluation, and validation, thus enabling the transformation of ideas into realistic propositions
- Facilitate access to various stakeholders such as funding agencies, venture capitalists, research institutions, government organisations, and industry partners
- Nurture innovative design and potential business ideas through phased support of Pre- incubation, Incubation and Accelerator





# Outstanding Results

Our students always excel in their studies and get top results in the university exams. The College produces many toppers and consistently obtains the best results in Nepal. Such praiseworthy performance is a source of inspiration to all. NCIT does its utmost to enhance student academic achievement.



**Prabin Sahani**  
BE Computer, CGPA 3.88



**Sushant Babu Luitel**  
BE Computer, CGPA 3.72



**Anish Limbu**  
BCA, CGPA 3.96



**Shova Kumari Chaudhary**  
BCA, CGPA 3.78



**Amir Thapa**  
BE Civil, CGPA 3.95



**Sujata Ghimire**  
BE Civil, CGPA 3.95



**Buddha Dahal**  
BE Civil, CGPA 3.92



**Pooja Upreti**  
BE Civil, CGPA 3.89



**Rekha Basyal**  
BE Civil, CGPA 3.78



**Nikita Kahdka Magar**  
BE Civil, CGPA 3.72



**Abina Sharma**  
BE Civil, CGPA 3.70



**Binayak Dotel**  
BE Software, CGPA 3.90



**Jeevan Niraula**  
BE Software, CGPA 3.81



**Aayush Basnet**  
BE Software, CGPA 3.79



**Sagar Bista**  
Elx & Com, CGPA 3.92



**Ashirbah Tamang**  
Elx & Com, CGPA 3.80



**Padam Pani Aryal**  
Elx & Com, CGPA 3.73



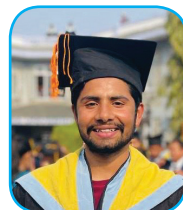
**Chudamani Awasthi**  
Elx & com, CGPA 3.72



**Suraj Thapa**  
BEIT, CGPA 3.89



**Deepak Sapkota**  
BEIT, CGPA 3.70



**Bibek Gautam**  
BEIT, CGPA 3.78



**Pallavi Panjiyar**  
BBA, CGPA 3.88



**Simanta Kasaju**  
ME Computer, CGPA 4.00



**Sumana Sharma Paudel**  
ME Computer, CGPA 3.95



**Hritik Jung Basnet**  
ME Computer, CGPA 3.94



**Bijaya KC**  
ME Computer, CGPA 3.81



**Er Bikalpa Dhakal, CGPA 4.0**  
BE, Computer Engineering  
Vice-Chancellor's Medal Awardee



**Er Nipesh Shrestha, CGPA 4.0**  
BE, IT Engineering  
Vice-Chancellor's Medal Awardee



**Er Nishikar Sapkota, CGPA 3.93**  
BE, Computer Engineering  
Vice-Chancellor's Medal Awardee



**Er Hemprabha Rampratap Karan, CGPA 4.0**  
ME, Computer Engineering  
Chancellor's Medal Awardee



**Er Shiv Raj Pokharel, CGPA 4.0**  
ME, Computer Engineering  
Chancellor's Medal Awardee



**Er Simanta Kasaju, CGPA 4.0**  
ME, Computer Engineering  
Chancellor's Medal Awardee



**Er Abhishesh Dahal, CGPA 4.0**  
ME, Computer Engineering  
Vice-Chancellor's Medal Awardee



# Dedicated Full-Time Faculty

**Er Amit Kumar Shrivastava**

*M Tech., CSE, MNNIT, Allahabad, India*

**Er Ankit Kharel**

*BE Computer, MA Economics, Tribhuvan University*

**Mr Arun Devkota**

*MSc Physics, Tribhuvan University*

**Er Aruna Chhatkuli**

*ME Computer, Pokhara University*

**Er Aryasupurna Tmalsina**

*MSc Power System Engineering, IOE, Tribhuvan University\**

**Er Ashok Basnet**

*MSc Computer System & Knowledge Engineering, IOE, Tribhuvan University*

**Er Ashim Khadka**

*PhD, Electronics Engineering, University of Greenwich, UK*

**Er Bhusan Thapa**

*MSc Wireless Communication System Engineering, University of Greenwich, UK*

**Mr Bimal Shrestha**

*MSc Statistics, Tribhuvan University*

**Er Birendra Bista**

*M Tech. IT, Kathmandu University*

**Er Basant Lekhak**

*MSc Environmental Engineering, IOE, Tribhuvan University*

**Mr Bishwa Neupane**

*MSc Chemistry, Tribhuvan University*

**Mr Dipak Raj Aryal**

*MA Mathematics, Tribhuvan University*

**Er Himal Acharya**

*MSc Information & Communication Engineering, IOE, Tribhuvan University*

**Mr Himalaya Ghimire**

*MPhil Mathematics, Kathmandu University*

**Er Ila Bhatta**

*MSc Water Resources Engineering, KU LEUVEN, Belgium*

**Mr Khageshwor Khanal**

*MPhil Management, Kathmandu University\**

**Er Kumar Pudashine**

*ME ICT, AIT, Thailand*

**Er Lok Nath Subedi**

*BE Civil Engineering, Pokhara University*

**Er Madan Kadariya**

*MSc IT Engineering, Lappeenranta University of Technology, Finland*

**Er Mahesh Neupane**

*MSc ISE, Purbanchal University*

**Er Mani Poudel**

*MSc Earth Quake Engineering, IOE, Tribhuvan University*

**Er Manil Vaidhya**

*MSc TIM, IOE, Tribhuvan University*

**Er Narayan Puri**

*MSc Climate Change & Development, IOE, Tribhuvan University*





**Er Narayan Prasad Regmi**

*MSc Construction Management, Pokhara University*

**Er Niranjan Khakurel**

*PhD Scholar, Department of Electronics & Computer Engineering, Tribhuvan University Erasmus KA 107-UPV, Spain*

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**Er Prakash Poudel**

*ME Computer, Pokhara University*

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*ME Computer, Pokhara University*

**Er Rishi Kanta Marseni**

*PhD Scholar, Department of Computer Science, Tribhuvan University*

**Er Resha Deo**

*MCIS, Pokhara University*

**Dr Roshan Chitrakar**

*PhD Information Security, Wuhan University, China*

**Er Roshan Kumar Sah**

*ME Computer, Pokhara University*

**Er Rudra Nepal**

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**Mr Samundra Paudel**

*PhD Scholar, Department of Management, Tribhuvan University*

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MBA, Pokhara University*

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*MSc ISE, Purbanchal University*

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**Mr Uttam Pokharel**

*MPhil Mathematics, Tribhuvan University*

**Er Umang Raj Pandey**

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**Mr Ukesh Shrestha,**

*MCIS, Pokhara University*

**Er Yogesh Deo**

*ME Electronics & Communication, Kathmandu University*





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Er Amrit Adhikari, *ME Computer*

Er Anil Verma, *ME Computer*

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Er Dhan Bahadur Poudel, *MSc Computer*

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Er Guru Datta Adhikari, *MSc Transportation Engineering*

Er Jnaneshwar Bohara, *MSc Computer*

Er Khem Raj Regmi, *MSc Structure Engineering*

Er Kiran Khanal, *ME Computer*

Er Kumod Prasad Bhatta, *MSc Transportation Engineering*

Er Mausam Bhandari, *MSc Water Resource Engineering*

Er Narendra Sitaula, *MSc Environmental Engineering*

Er Nipun Thapa, *ME Computer*

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Er Prem Chandra Roy, *MSc Climate Change*

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Er Subash Kumar Bhattarai, *MSc Construction Project Management*

Er Sudip Lamsal, *MSc Structure Engineering*

Er Sunita Ghimire, *MSc Earth Quake Engineering*

Er Suraj Burlakoti, *MSc Information & Communication*

Er Suramya Sharma, *Master of Information System Engineering*

Er Surya Bahadur Basnet, *MSc IT*

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Ms Sarita Khanal, *Administration*

### Deputy Administrator

Mr Binod Kr. Upadhaya, *Exam*

Mr Charan Singh Chhetri, *Administration*

Ms Nisha Bhattarai, *Library*

Mr Rajendra Rimal, *Account*

Mr Sunil Khadgi, *Store*

### Assistant Administrator

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Ms Rupa Gelal, *Civil*

Ms Shanta Karki, *Library*

Ms Sharada Neupane, *Exam*

Mr Utsav Mishra, *Account*

### Department Assistant

Ms Bindira Thapa, *BBA /Electronics & Communication /BCA*

Mr Prasanna Gelal, *Software*

Mr Sagar Karki, *Graduate Program*

Mr Shantosh Rai, *Computer*

Mr Subash Khadka, *IT*

### Front Desk

Ms Ashma Munakarmi, *Front Desk Officer*

Ms Mira Badal, *Senior Front Desk Officer*

Ms Sadikhya Paudel, *Front Desk Officer*

### ECA

Mr Gyanendra Babu K.C., *Extracurricular Activities*

Mr Sujana Gurung, *Extracurricular Activities*

### Security

Mr Anup Chaudhary, *Security Guard*

Mr Balram Khadka, *Security Supervisor*

### Technical Staff

Mr Bibek Pudasaini, *Lab Instructor (Civil)*

Ms Bhawana Thalal, *Lab Technician (Physics/Chemistry)*

Mr Bhagwat Ram Gelal, *Lab Technician (Electronics)*

Mr Chitra Bahadur Khadka, *Lab Technician (Electronics)*

Mr Dal Bahadur Rana, *Lab Technician (Civil)*

Mr Dev Bd. Basnet, *Lab Assistant (Civil)*

Mr Hukum Bd. Basnet, *Lab Assistant (Workshop)*

Mr Jeevan Panta, *Lab Technician (Civil)*

Mr Madan Rai, *Lab Technician (Computer)*

Mr Manohar Joshi, *Lab Assistant (Computer)*

Mr Pappu Sunuwar, *Lab Technician (Computer)*

# Research, Training & Placements

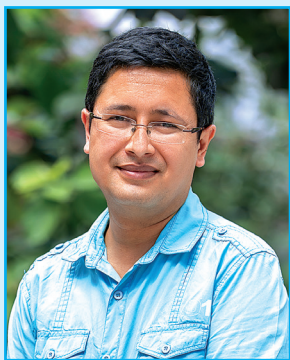


**Prof Roshan Chitrakar, PhD**  
Head  
Project & Research Management Cell

The Research Management Cell at NCIT (RMC@NCIT) has been formed as an institutional requirement according to the guidelines of the Pokhara University Research Centre (PURC).

- To promote and facilitate faculty members in conducting research activities in college and / or setting collaborative research work with other research professionals and institutions, nationally and internationally
- To enrich faculty members with research attributes and to expand their research network beyond the boundary of academics
- To develop a research culture in students by incorporating innovation and uniqueness into their thesis work and scientific / engineering projects
- To manage resources and to support faculty members and students effectively for conducting research work and getting it published
- To impart the required education and training for research and skill development for faculty members and students
- To organize seminars, talk programs, and conferences, and to manage printed and on-line publications
- To establish tie-ups and joint ventures so that the horizon of research and innovation is broadened and students can access the market as soon as possible

The RMC@NCIT also organizes exhibitions, expos, and similar events by showcasing students' work regularly (mostly on semester basis) for the sake of promoting them and their products to the outside industry and business. It always welcomes any new means of activities that will help students display their work in the community of research and design at large.



**Er Ashim Khadka, PhD**  
Head  
Career Guidance & Placement cell

NCIT is a renowned institution that not only offers high-quality education in the field of information technology but also actively supports students in their career development. NCIT does this by organizing events like career fairs, nurturing at the Nepal IT Incubator, internships, and project-based learning for students to succeed in the dynamic and competitive field of IT. NCIT's dedication to academic excellence and industry engagement makes it a top choice for aspiring IT professionals in Nepal





**NCIT**  
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(Affiliated to Pokhara University)

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