

# **KCT** Kathmandu College of Technology



**BCA**

**BSC. CSIT**

**BBS**

Affiliated to  
Tribhuvan University 

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

# About KCT

**Kathmandu College of Technology (KCT)**, a modern college, is established in 2013 with an aim to significantly contribute to shape the career of +2 graduates in the field of Applied Computing & Information Technology. The programs **B.Sc. CSIT** & **BCA** at KCT is affiliated to Tribhuvan University (TU). The college, in fact, is committed to helping students to develop skills, knowledge, and attitudes that help them pursue career in IT and Computing.

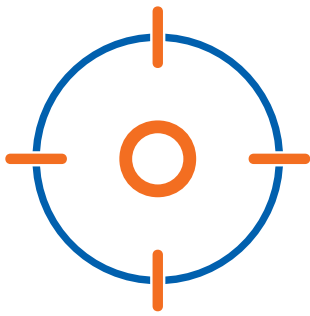
**KCT** understands the advancement of Information Technology which continues to have a profound impact on industries and businesses in our life, and addresses the need of technically competent graduates to provide appropriate applied computing solutions that industry requires.

Besides curricula designed by the University, the college will also teach students soft skills, problem solving skills, critical thinking, and industry relevant additional IT courses. Most importantly, the course taught offers both theories & practical applications where students are encouraged to apply their classroom instructions to professional environment through project works and internship opportunities. Emphasis is placed on helping students to develop skills, knowledge in technical areas that have practical value in the workplace.

**KCT** exists to provide its students a combination of leading-edge theories and technical understanding plus hands-on practical experience to prepare our students for a successful career as an IT professional within the country and around the globe.







## Aim

We aim to teach, train, guide, and motivate students to effectively make their way into a challenging and rewarding IT and computing career.



## Mission

The mission of the KCT is to expand human knowledge and benefit society through research integrated with education. We prepare students to investigate the most challenging, fundamental problems in technology while educating outstanding students to become creative members of society.



## Values

Institutional values influences how we make and carry out decisions, and how we interact with internal and external constituencies. Our core values are:

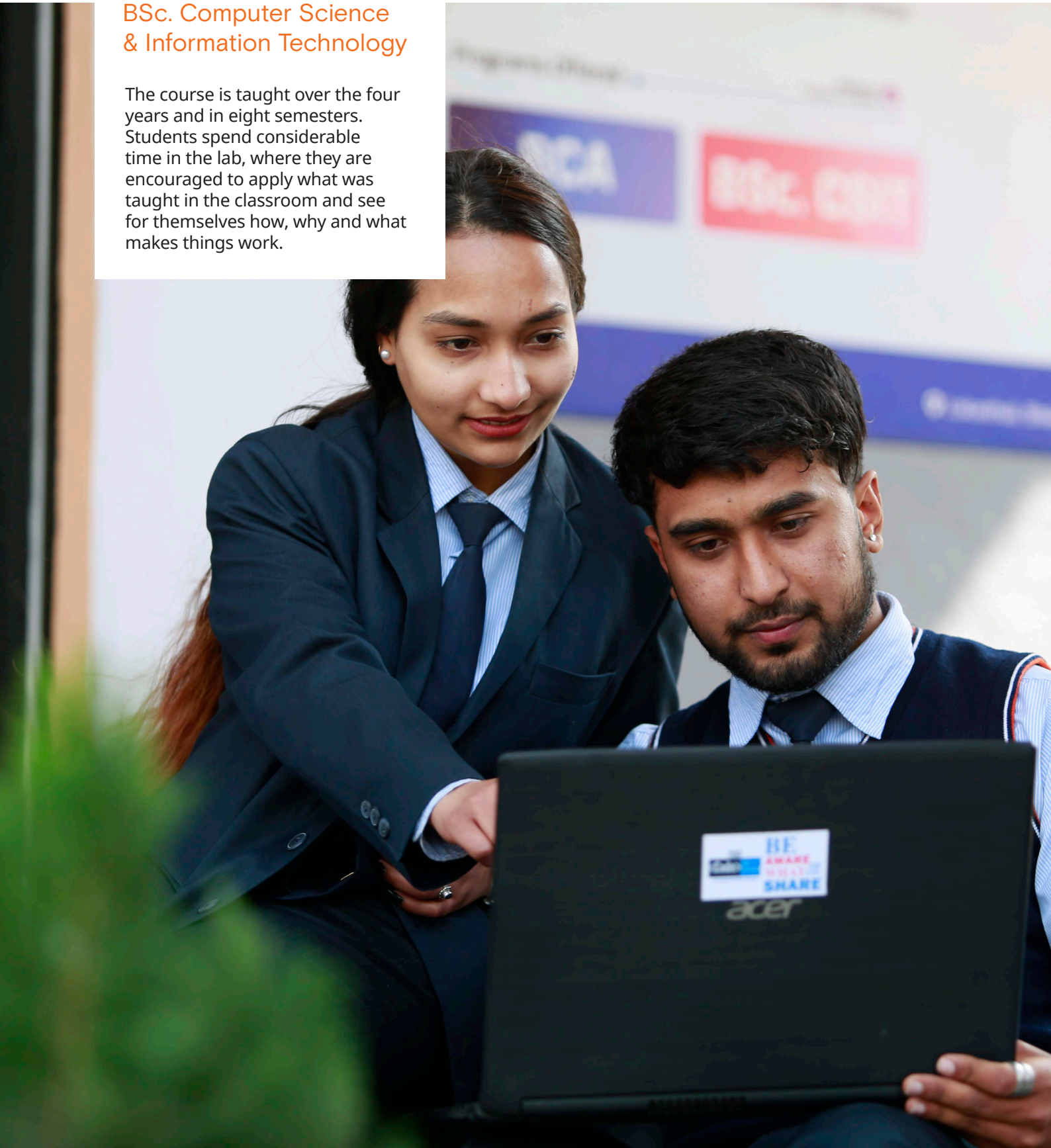
- Dedication
- Honour
- Respect
- Responsibility
- Trust



# BSc.CSIT

## BSc. Computer Science & Information Technology

The course is taught over the four years and in eight semesters. Students spend considerable time in the lab, where they are encouraged to apply what was taught in the classroom and see for themselves how, why and what makes things work.





## FIRST SEMESTER

CSC-109	Introduction to IT
CSC-110	C Programming
CSC-111	Digital Logic
MTH-112	Mathematics I
PHY-113	Physics

## SECOND SEMESTER

CSC-160	Discrete Structure
CSC-161	Object Oriented Programming
CSC-162	Microprocessor
MTH-163	Mathematics II
STA-164	Statistics I

## THIRD SEMESTER

CSC-206	Data Structure and Algorithms
CSC-207	Numerical Method
CSC-208	Computer Architecture
CSC-209	Computer Graphics
STA-210	Statistics II

## FOURTH SEMESTER

CSC-257	Theory of Computation
CSC-258	Computer Networks
CSC-259	Operating Systems
CSC-260	Database Management System
CSC-261	Artificial Intelligence

## FIFTH SEMESTER

CSC-314	Design & Analysis of Algorithms
CSC-315	System Analysis & Design
CSC-316	Cryptography
CSC-317	Simulation & Modelling
CSC-318	Web Technology

### Elective: Any one

CSC-319	Multimedia Computing
CSC-320	Wireless Networking
CSC-321	Image Processing
CSC-322	Knowledge Management
MGT-323	Society & Ethics in IT
MGT-324	Microprocessor Based Design

## SIXTH SEMESTER

CSC-364	Software Engineering
CSC-365	Compiler Design & Construction
CSC-366	E-Governance
CSC-367	NET Centric Computing
CSC-368	Technical Writing

### Elective: Any one

CSC-369	Applied Logic
CSC-370	E-commerce
CSC-371	Automation & Robotics
CSC-372	Neural Networks
CSC-373	Computer Hardware Design
CSC-374	Cognitive Science

## SEVENTH SEMESTER

CSC-409	Advanced Java Programming
CSC-410	Data Warehousing & Data Mining
MGT-411	Principles of Management
CSC-412	Project Work

### Elective: Any one

CSC-413	Information Retrieval
CSC-414	Database Administration
CSC-415	Software Project Management
CSC-416	Network Security
CSC-417	Digital System Design
MGT418	International Marketing

## EIGHTH SEMESTER

CSC-461	Advanced Database
CSC-462	Internship

### Elective: Any two

CSC-463	Advanced Networking with IPV6
CSC-464	Distributed Networking
CSC-465	Game Technology
CSC-466	Distributed & Object Oriented Database
CSC-467	Introduction to Cloud Computing
CSC-468	Geographical Information System
CSC-469	Decision Support System & Expert System
CSC-470	Mobile Application Development
CSC-471	Real Time Systems
CSC-472	Network & System Administration
CSC-473	Embedded Systems Programming
MGT-474	International Business Management

# BCA

## **Bachelor in Computer Application (BCA)**

is a TU affiliated, four years undergraduate degree course. With the rapid growth of IT industry in worldwide, the demand of computer professional is increasing day by day. This increasing growth of IT industry has created a lot of opportunities for the computer graduates. KCT has 100 % result in BCA till date.

Bachelor in computer application (BCA) is one of the courses that connects students to an promising career in computing and IT. The course helps students develop a lot of practical in hand skills in different areas in IT and computing. The students interested in computer field and wants to work in the IT sector as programmer or software develop can study this course.

## **Entry Requirement**

- +2 or A level in any discipline





# BCA Syllabus

## FIRST SEMESTER:

CACS101	Computer Fundamentals and Applications
CASO102	Society and Technology
CAEN103	English I
CAMT104	Mathematics I
CACS105	Digital Logic

## SECOND SEMESTER:

CACS151	C Programming
CAAC152	Financial Accounting
CAEN153	English II
CAMT154	Mathematics II
CACS155	Microprocessor and Computer Architecture

## THIRD SEMESTER:

CACS201	Data Structures and Algorithms
CAST202	Probability and Statistics
CACS203	System analysis and design
CACS204	OOP in Java
CACS205	Web Technology

## FOURTH SEMESTER:

CACS251	Operating System
CACS252	Numerical Methods
CACS253	Software Engineering
CACS254	Scripting Language
CACS255	Database Management System
CAPJ256	Project I

## FIFTH SEMESTER:

CACS301	MIS and E-Business
CACS302	DotNet Technology
CACS303	Computer Networking
CAMG304	Introduction to Management
CACS305	Computer Graphics & Animation

## SIXTH SEMESTER:

CACS351	Mobile Programming
CACS352	Distributed System
CAEC353	Applied Economics
CACS354	Advanced Java Programming
CACS355	Network Programming
CAPJ356	Project II

## SEVENTH SEMESTER:

CACS401	Cyber Law & Professional Ethics
CACS402	Cloud Computing
CAIN403	Internships
Elective I	
First Year Elective II	

## EIGHTH SEMESTER:

CAOR451	Operations Research
CAPJ452	Project III
Elective III	
Elective IV	

## List of Elective Courses:

CAPS476	Applied Psychology
CACS477	Geographical Information System
CACS478	IT in Banking
CACS479	Hotel Information System
CAER480	Enterprise Resource Planning
CACS482	Knowledge Engineering
CACS483	Advanced DotNet Technology
CACS484	Database Programming
CACS485	Database Administration
CACS486	Network Programming

# BBS

(IT Enabled)

## Bachelor Of Business Studies

The Bachelor of Business Studies (BBS) course is an undergraduate degree course that is of four-year duration based on annual system. This course is an amalgamation of academic knowledge of business and related subjects like marketing, economics, accountancy, finance, etc with practical work experience. KCT provides full IT enabled environment on teaching and learning this course





# | BBS Syllabus

## FIRST YEAR

MGT 201	Business English
MGT 202	Business Statistics
MGT 203	Business Statistics
MGT 211	Accounting for Financial Analysis
MGT 213	Principles of Management

## SECOND YEAR

MGT 205	Business Communication
MGT 206	Macro Economics
MGT 212	Cost & Mgmt. Accounting
MGT 214	Fundamentals of Marketing
MGT 216	Foundations of HRM

## THIRD YEAR

MGT 204	Business Law
MGT 215	Fundamentals of Financial Mgmt
MGT 217	Business Environment & Strategy
MGT 218	Taxation and Auditing
MGT 219	Organizational Behavior

## FOURTH YEAR

Accounting
Finance
Management
Marketing

## BBS At KCT

KCT College has been running its BBS Program in affiliation with the TU. Every year our BBS graduates secure excellent results. As a result, KCT College has been ranked as one of the best private colleges for BBS Program in Nepal. The credit undoubtedly goes to its highly qualified, well-experienced, dedicated and nationally and internationally renowned Faculty Members, Parents and well-disciplined and hard-working students as well. Admissions are open for BBS level after certificate/+2 level results.

Students who have completed four years of study and taken the yearly final exam held by the TU will be graded on the basis of the scores. Any student holding a +2 or equivalent degree recognized by TU can apply for admission in BBS program. All the students are required to take two terminal exams and a pre-board exam to be qualified for the TU board exam.



## Why Study

# BSc.CSIT BCA at KCT?

KCT recognizes the existing gaps between industry and human resources available. Therefore, the college is committed to delivering the education that addresses the needs of industries face or likely to face in the mid twenty-first century. The teaching and learning strategies applied enable students develop capabilities to solve the problems and deal with the challenges in both familiar and unfamiliar circumstances. This means KCT prepares students to address the need of technically competent IT professionals that business industries, government bodies, NGOs, INGOs, hospitals, banks and other kinds of organizations require.

This is achieved through engaging students in different project works and assignments which help them possess the appropriate combination of knowledge and practical to take care of both organization's information technology infrastructures and the people who use it. Further, experiential learning and hands-on exposure to current and emerging technology is a key feature at KCT's IT courses. Students will have access to fully equipped and specialized computer laboratories right from the beginning of your course. Also, the college maintains strong industry links through research and educational programmes, so our students have the opportunity to be involved in the industry projects and work experience.

Most importantly, KCT puts all its efforts to produce graduates who are multi-skilled, multi-tasked and good human who will be well-rounded IT professionals with significant exposure to a diverse range of IT practices and possess the ability to identify changing needs of relevant sectors through research and develop IT and computing solutions to address those needs in this ever-evolving and fast moving industry.





## Additional Courses offered at KCT

There can be variation as per the need of  
students and industry requirements



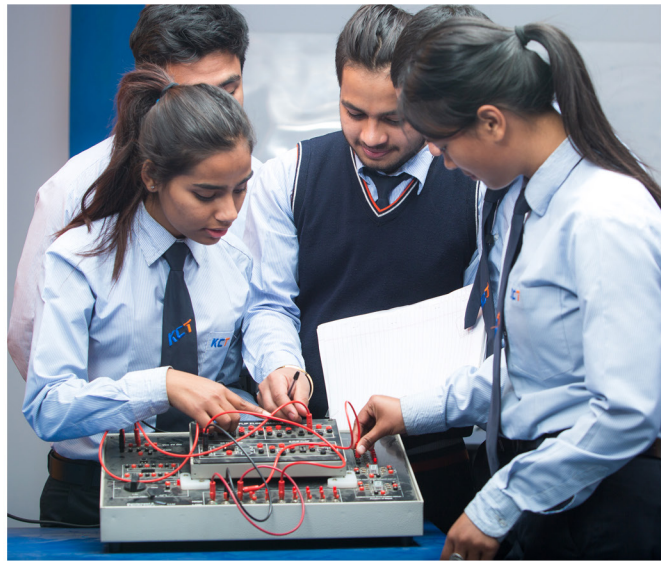
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## Career Path

- *Software Developer*
- *Web Developer*
- *Network Administrator*
- *Database Administrator*
- *IT Manager*
- *Cryptographer*
- *Ergonomics Program*
- *System Analyst*
- *Project Manager*
- *AI Specialist*
- *Information System Manager*
- *Database Operator*







# Students Testimonial



**Niraj Baidya**  
Bsc.CSIT  
(Batch 2070)

“

“Teaching, training, guidance, and motivation”, a complete package of effective learning is what we can absolutely expect from KCT. Reading, writing and mutual interactions are common things; what we have here is: ‘preparation to our best level in order to get the right track for Journey of success to make our life meaningful, additionally.’ KCT brings us a group of like-minded, creative, vibrant and qualified young teachers with enormous enthusiasm coming together on one platform to foster the education status of the students. KCT provides its students a combination of leading-edge theory and technical knowledge plus hands-on practical experience to prepare students for a successful career as an IT professional in Nepal and around the world. So, I am very proud to be the part of KCT and claim that I was completely right when I chose KCT.

”



**Suesha Giri**  
Bsc.CSIT  
(Batch 2073)

“

“Where will I get the best education?” was the question frequently striking my mind. Finally, after observing many colleges, I decided to pursue my bachelor’s degree from KCT because of its academic excellence. And I have no any regrets regarding my decision as KCT has given me everything I needed from a College – highly motivating and supportive learning environment along with excellent teaching facilities, great learning resources and more practically focused learning to grab various opportunities in the field of IT.

It is the platform which helped me to shape my thoughts, build a path leading to my dreams and explore my ideas in different sectors. Here, extracurricular activities go hand in hand with Academics which indeed is a heavenly experience. I am proud to be one among the lucky students. And now, turn is yours.

”



**Sagar Rana Magar**  
Entrance Topper  
MSc.CSIT, TU, 2076

“

When I first started at KCT, I was unsure about my future thinking about the different challenges I was heading forward to face. But, the trust I gave to KCT returns me with the trust and the environment for imbibing knowledge, developing my overall personality and fueling confidence in me along with changed perspective on my work, the different tasks as well as how to plan strategically for future tasks in order to save time and cost.

At KCT, everything possible is done to make the student life high quality learning focused rather than study focused. Here, motivation and skill development along with academics makes a course complete. The great platform for learning with the encouragement and dedication from helpful, open and supportive faculty members and other staffs broadens your knowledge base. I am proud to have been a part of KCT and given a chance to travel back in time, it is the college I would go back to.

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# **KCT** Kathmandu College of Technology



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