



 www.iimscollege.edu.np

BSc (Hons)
COMPUTING

BSc (Hons)
NETWORK TECHNOLOGY & CYBERSECURITY





WH **WE** ARE

IIMS (Institute of International Management Science), located at Dhobidhara, Kathmandu, has been running different IT, Hospitality and Management courses since 2010. It has established itself as one of the preferred college in Nepal amongst students wishing to continue their career in IT and Hospitality

Management. Over the time, it has multiplied its association with various industries, has provided state of the art infrastructure, deployed experienced faculty members and has lived up to the expectation of students, which makes it an ideal place to pursue their career further. IIMS invites you to join its journey in educating IT and Hospitality Management professionals who are to be the leaders of tomorrow's world.

We take you to your final destination of bright career through holistic development of attitude, skill and knowledge. We offer globally recognized B.Sc. (Hons) Computing and BA (Hons) Hospitality Management courses, under the affiliation to UCSI University for students who wish to make key transitions in their careers. It is designed to give rise to future professionals rather than mere degree holders.

IIMS has completely different approach to learning, going beyond bookish knowledge. Instead it sharpens technical skills through Presentations, Case Studies, Project Works, Workshops, Trainings, Industry Visits, Internships, and Guest Lectures by professionals and experts that helps deal with real life situations better.



UCSI University[®]

MALAYSIA'S #1 PRIVATE UNIVERSITY

UCSI University is a vibrant community of learning and scholarship. With more than 10,000 students from 80 different countries, the University stands out as a melting pot of diversity and learners will supplement their pursuit of knowledge with a keen sense of cultural appreciation – a vital trait in today's borderless world. As one of Malaysia's first private universities, UCSI University has long impacted the national higher education landscape and the University continues to do so with its wide range of undergraduate and postgraduate programmes.



Among the
BEST
performing
comprehensive private
university for
**GRADUATE
EMPLOYABILITY**



The 1st
university in Asia to
facilitate industry
placement for
students
each year.



110
NATIONALITIES
on campus. The world
studies here.




**OVER 10,000
STUDENTS**
on campus

Over 30%
of UCSI's students population is
INTERNATIONAL.



1 IN 5
UCSI students obtain a
merit-based government
scholarship or grant.

RANK 400. TOP 1.3% OF ALL UNIVERSITIES WORLDWIDE

THE FUTURE OF COMPUTING & IT

At IIMS, we are constantly keeping ahead to ensure our students graduate future-ready and future-proof. This 4th Industrial Revolution (4IR) will change the way business is done. The revolution is characterised by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and will challenge the status quo of education and its graduates.

Like most progressive fields of studies, computing and IT is fuelling the speed of technological acceleration. Here are some advancements that are being discussed, anticipated and adopted globally:

3 KEY PILLARS OF BLOCKCHAIN TECHNOLOGY

- Decentralisation
- Transparency
- Immutability

A set of immutable data records, managed via neutral clusters of computers

The ability of computers that can simulate HUMAN-LIKE BEHAVIOURS, INSTINCTS, and to FORMULATE SOLUTIONS BASED ON EXPERIENCES.

AI-enabled user interfaces and process automation will replace

$\frac{1}{3}$ of today's screen-based apps



CLOUD & EDGE COMPUTING

Provide businesses HIGHER COMPUTING POWER to analyse crucial data while reducing on-premise hardware required for network connection



KEY PROPONENT OF THE 4th INDUSTRIAL REVOLUTION

- ✓ Faster speeds
- ✓ Faster connections
- ✓ Faster cloud access

- DIGITAL SKILLS
- ANALYTICAL ABILITIES
- CONTINUOUS LEARNING CAPABILITIES

With AI technology, traditional and manual skills would be in excess in the market. At the ever-changing work landscape, employers seek staff equipped with HIGHER COGNITIVE CAPABILITIES in order to help transform their businesses

We continuously focus to research what's ahead to ensure we have the capacity, skills and knowledge to equip our students with unconventional teaching and learning methods.

WHY COMPUTING & IT AT IIMS ?

HERE IS OUR EDGE, AND YOUR ADVANTAGE:



MEETING INDUSTRY STANDARDS

IIMS offers a range of career-focused programmes, where graduates continue to meet industry standards, filling out the talent pool in ICT.



DRIVING INNOVATION THROUGH TECHNOLOGY

We aim to provide students with ample opportunities to influence the future of the modern world-pioneering the frontiers of Computing and Information Technology with a positive impact on society.



INDUSTRY RELEVANT CURRICULUM

Our industry relevant curriculum is a result of a conducive environment and multiple strong collaborations including, close ties to the industry, professional bodies, government agencies, and academia.



PROGRAMMES OFFERED ARE COMPREHENSIVE

Our programmes offered are comprehensive in practical content, using relevant and latest learning technologies. We ensure that you are future-ready, as we enter the 4IR.



BSc(HONS) COMPUTING

B.Sc. (Hons) Computing Programme equips students with the skills needed to contribute to this exciting and rapidly evolving field.

Students will gain not only knowledge and practical experience of the latest technologies, but also a grounding in the underlying principles of the subject. It is this combination of skills that enable our graduates to keep pace with this fast moving subject, and secure rewarding careers that can be pursued almost anywhere in the world.

PROGRAM HIGHLIGHTS

- x Syllabus is subject to 10% alteration each semester to incorporate new developments and changes in technology.
- x A strong focus on IT technical knowledge and skills like programming, database, networking and multimedia.
- x Opportunity to employ the knowledge learnt in the classroom to real world scenarios via extracurricular framework boosting leadership, motivation, and self-satisfaction.
- x Gain industry experience through co-operative placement internships every year.

YEAR 1

- Extra Curricular Learning Experience 1
- University Life (Malaysian/International)
- Introduction to Programming (Python)
- Discrete Mathematics
- Computer Organisation & Architecture
- Database Management Systems(Oracle)
- Object-oriented Programming (Java)
- Object Oriented Analysis & Design
- Database Administration (Oracle)
- Introduction to Internet Technologies (HTML,CSS,JAVASCRIPT)
- Nepalese Society and Politics
- Cooperative Placement 1 (Internship / Training)

► What to expect

14 courses covering 46 credits introduces key concepts and tools underpinning modern computer science.

Students will learn how to program in Java and databases, and study the architecture and applications of computer systems.

It further covers more advanced subjects including as database administration and Java programming.

YEAR 2

- Extra Curricular Learning Experience 2
- Data Structures & Algorithms
- Mobile Commerce
- Introduction to Human Computer Interaction
- Operating Systems
- Database Design
- Research Methods in Computing
- Networking
- Software Project Management
- Multimedia Programming (Adobe Creative)
- Business System Development Tools (CASE tools)
- Cloud Computing
- Cyber Law
- Database Technology (Oracle)
- Cooperative Placement 1 (Internship / Training)

► What to expect

13 courses covering 40 credit that introduces to trending courses like Software project management and HCI.

Students will continue practicing programming to fulling assessment of various subjects.

Student will be studying database alongside other areas of computing such as operating system, networks and multimedia.

YEAR 3

- Extra Curricular Learning Experience 3
- English for Academic Skills
- Programming for Computer Science (Python)
- Object Oriented Methods
- Project Formulation (Project Proposal)
- Application Layer Programming (Network Programming)
- Network Security Design
- Business Case Project (Product Development)
- Project Design & Implementation (Final Year Project)
- Intelligent Systems (Ai/Machine Learning)
- Web Programming (PHP, jQuery, JSON)
- Cooperative Placement 1 (Internship / Training)

► What to expect

12 courses covering 37 credit provides an opportunity to bring acquired skills together to address real data analysis problems in a rich and supportive environment by developing and demonstrating prototypes to full-fill each subject's assessments.

Students will undertake a wide range of specialized modules such as java web programming, mobile commerce alongside final year individual project.

Above subjects list may change, for example due to curriculum developments by UCSI University. Hence the above list contains current subjects that UCSI offers, and may not be taken as a definitive list. The most up to date information can be found on our website at <https://www.ucsiuniversity.edu.my/programmes/bsc-hons-computing>

INTERNATIONAL DEGREE PATHWAY (IDP) via B.SC. (HONS) COMPUTING

IDP Programme	Pathway	University	Country
Bachelor pf Science (Hons) Information Technology	2+1 / 1+2	Middlesex University	United Kingdom
Bachelor of Computer Science	1.5 + 1.5	University of Queensland	Australia
Bachelor of Science (Hons) Information Technology	2+1	University of the West of England, Bristol	United Kingdom



“Personally I believe college life is not only about academics, it’s also about the once in a life-time experience that we call college life. At IIMS we learn a lot, but we also have a lot of fun !. One thing that I can say about the faculty members at IIMS is that they are really generous with giving opportunities for students to learn and grow. And even if you are a student, they do not treat you as if you are just a kid and I personally have sensed a lot of mutual respect from not only lecturers but all faculty members and I feel that makes us feel really comfortable as students.”

Faraz Ahmed Khan (Python Developer-AI Dept @ Ekbana)
B.Sc (Hons) Computing, Sept. 2018

“Due to global pandemic and lockdown, we were not able to attend physical classes and besides classes we also missed the fun part of attending college programs. I am glad that we were able to continue our online classes without wasting anytime. There were some difficulties and confusions at the beginning but slowly we were able to attend and understand everything. For now, I am pleased, that we are able to continue our physical classes even if it is for two days. My suggestion to prospective students is, learn to cope with situation and go with the flow. Thank you.”

Dipshikha Shrestha
B.Sc (Hons) Computing, Jan 2020



TEACHING AND LEARNING

At IIMS we aim to provide a unique experience. Studying B.Sc. (Hons) Computing with us will give you the chance to follow your academic curiosity and explore this fascinating subject.

A significant amount of students work will be project-based team work, tackling real problems. Students will see how computer science is directly applicable to solving problems, across a broad range of areas.

The emphasis throughout is on independent learning, supported by hands-on practical experience and regular meetings in small groups with personal tutors. Students receive practical help and support from experienced lecturers and industry experts adding further to their learning stimulating their interest. This approach is supported by conventional/guest lectures, practical/tutorials, trainings & comprehensive on-line learning resources.

COURSEWORK AND ASSESSMENT

Unseen examinations account for about 40-50% of the assessment. These assess student's abilities in the selection and application of knowledge, problem solving, and the design and evaluation of software prototypes.

Other assessment is mainly through laboratory-based coursework that provides students with the opportunity to demonstrate their understanding of computer science by tackling specific problems on a more realistic scale, both individually and in groups.

The remaining assessment is through reports and presentations, where, in particular, student demonstrates the transferable skills they have acquired. Some courses in second and final year the non-examination assessment is mainly made up of the practical project.

ABOUT UNIVERSITY



Lincoln University College, Petaling Jaya was established in 2002 as Lincoln College (LC) and upgraded in 2011. Lincoln University College is one of the premier private institutions of higher education approved by the Ministry of Higher Education and Malaysian Qualifying Agency (MQA- National Accreditation Board). The University College is situated in the cosmopolitan town of Petaling Jaya Near Kelana Jaya LRT Station, which is 10 kilometers West of the capital city, Kuala Lumpur. The founders and administrators of LINCOLN are true academicians who are committed to helping the students to achieve their potential in the education, research and employment world of this exciting new millennium. They bring together almost fifty years of higher education, post-secondary education and language teaching experience. Their backgrounds include teaching, research and professional training. LINCOLN focus is student centered and student-directed. Our philosophy is that everyone has a claim to education in order to better their life, advance their career and reach their desired level of personal success.

RECOGNITION



Approved By Ministry of Education



Tribhuvan University Equivalent

ACCREDITATION & RECOGNITION





BSc(Hons) Network Technology & Cybersecurity

The Lincoln University College (LUC) Bachelor of Computer Science (Hons) (Network Technology and Cybersecurity) is focused a unique opportunity to learn about specialist security techniques and use real world networking equipment in a security context. Students are also educated about market-leading Cisco Routing & Switching Techniques, security appliances, ethical hacking techniques, vulnerability analysis, penetration testing and data encryption technology.

PROGRAM HIGHLIGHTS

- x Acquire and apply knowledge of Network and Security fundamentals in to the Computer Science field
- x Demonstrate comprehensive technical expertise in Network Technology and Cyber security.
- x Communicate effectively both in written and spoken form with Network analysts, other professionals and community.
- x Identify, formulate and provide creative, innovative and effective Network and Cyber security solutions.
- x Function individually or in teams, effective with sustainable approaches.
- x Recognize the need for and to engage in, life-long learning and professional development.
- x Self-motivate and enhance entrepreneurship skills for career development.

IN PARTNERSHIP WITH



IN ACADEMIC COLLABORATION WITH



YEAR 1

- Business English
- Computer Network
- Web Designing
- Discrete Math
- Security Computing
- Basic Computer Application
- Advance Computer Architecture
- Advance Computer Network
- System Analysis & Design
- Digital Logic
- Windows Server 2016
- Cyber Security Law and Policy

YEAR 2

- Operating System
- E-Commerce
- Data Structure and Algorithm
- Wireless Communications
- Ethical Hacking
- Database Management System
- Advance Database Management System
- Data Communication & Networking
- Linux Administration (WAN & MAN)
- Leadership and Human Relations
- Cyber Security Management
- Embedded System
- Software Project Management

YEAR 3

- Cryptography
- Information Security Management System
- Artificial Intelligence
- Advance Routing Technology (WAN)
- Project Work
- System Software & Administration
- Digital Crime Investigation
- Industrial Management
- Cloud Computing
- Industrial Training



BECOME FUTURE-PROOF

INTERNATIONAL DEGREE WITH LOCAL INDUSTRY ALLIANCE

INDUSTRY DESIGNED AND DELIVERED TRAININGS

Training at IIMS is unlike anywhere else, We don't teach tech but nurture you how to use one. IIMS hosts yearly training for all interested students. Unlike traditional sessions where the teacher teaches/explains codes, at IIMS, the training is largely shaped, influenced and delivered by the industry partners so as to meet their needs and industry demands so as to equip students not only with technology-know-how but also the working dynamics. Involved trainers closely monitor students progress and skills honed assisting towards the head-hunt process. In a nutshell all training at IIMS is industry-driven and delivered leading to direct placements.

01	Python for Everybody	43 trained	5 hired
02	Software Quality Assurance (https://drive.google.com/file/d/1j0ADCgpDihhLUGK1MeJrHC9E3hTlucX8/view?usp=sharing)	62 trained	21 hired
03	Code with Node.js (https://github.com/gobeam/node_app_demo_iims)	46 trained	13 hired
04	Restful API with Laravel	56 trained	7 hired

Amazing fact is our students were finding placement even during a pandemic.

INDUSTRY DESIGNED AND DELIVERED TRAININGS

A new initiative by IIMS Computing department starting 2021 session, to develop students technical skills alongside entrepreneurial skills, We call that technopreneurship, which will be delivered under supplement training requiring students to work on the project of their interest upon completion of the training courses. Much of the delivery will be based on workshops focusing on how to materialize the idea. Students are usually grouped together to form start-up companies. You will be taught to create jobs instead of seeking jobs.

INDUSTRY-DRIVEN FINAL YEAR PROJECTS

All students are mandatorily required to complete their major final year project. Though students are allowed to continue with the project topics of their interest, IIMS also allows students to continue with the topics proposed by our industry partners. Certainly this is like taking a hike in a rocky desert while you can drive. Hiking being the later part. But definitely will be rewarding as students will be exposed to current industry practices, challenges faced by industry partners and understand the real complexity aiding towards better learnings.

01 - Personal and group travel planner (2018)

02 - Automated question generator with applied Bloom's Taxonomy (2019)

03 - Course registration tools with Python (2019)

04 - Realizing Near Field Communications (2021)

INTERNATIONAL DEGREE PATHWAY

PURSUE WORLD CLASS EDUCATION WITH THE UCSI-LINKED UNIVERSITIES



AUSTRALIA

The University of Queensland • RMIT University • Griffith University • Queensland University of Technology • Curtin University of Technology • Deakin University • The University of Melbourne



NEW ZEALAND

Auckland University of Technology (AUT)



UNITED KINGDOM

Northumbria University • Middlesex University • University of the West of England, Bristol • University of Northampton • University of Hertfordshire • University of Huddersfield • University of Central Lancashire • Aston University • University of the Creative Arts • University of Essex



CANADA

University of Manitoba



IRELAND

Galway-Mayo Institute of Technology • Griffith College • Waterford Institute of Technology • Maynooth University



MYANMAR

Myanmar International Business Academy (MIBA)



SPAIN

Universidad Católica San Antonio de Murcia (UCAM)



FRANCE

Institut Supérieur d'électronique de Paris (ISEP) • Rennes Business School



JAPAN

Shibaura Institute of Technology • JF Oberlin University



CHINA

Beijing Geely University • Jinan Engineering Vocational Technical College • Chuzhou Vocational Technical College • Heze University • Chongqing University of Arts & Science • Weifang Nursing Vocational College • Suzhou Centennial College • Sichuan International Studies University



INDONESIA

Universitas Multimedia Nusantara • Indonesia International Institute for Life-Sciences (i3L) • Telkom University • Universitas Pembangunan Jaya • Binus University



MOROCCO

Al Akhawayn University



SOUTH KOREA

Hoseo University • Chung-Ang University • Hansei University • Inha University • Kyung Hee University • Sejong University



TURKEY

ABHorizon



EGYPT

Delta University • Track International Academy



VIETNAM

FPT University • University of Finance and Marketing



UAE

Cornerstone College of International Studies



INDIA

Indian Institute of Technology Bombay (IIT Bombay) • Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences



THAILAND

King Mongkut's Institute of Technology Ladkrabang • Maejo University



GERMANY

Ludwigshafen University of Applied Sciences • Hochschule Aalborg University of Applied Sciences



HONG KONG (SAR)

Social Resources Development Institute



Kundan Adhikari

*Continued @ IIMS Until 2019 Sep
Transferred to CUNY, 2020*

Student of IIMS successfully Transferred to Bachelors of Science in Computer Science at City University of New York (CUNY), USA.

Out of 31 credits received, 25 credits were evaluated as transfer credits.



Manjit Shakya

*Associate Software Engineer @ fisoft
BSc(Hons) Computing, Jan 2017*

"I had chosen IIMS because I was really impressed by the curriculum as well as the fee structure and the time period of just three years was really attractive."

Unique Learning Opportunities

The Faculty offers intensive cultural exchange and student mobility programmes in collaboration with partner institutions, open to university students from around the world.

SUMMER PROGRAMME

Student Mobility Programme

You will have the opportunity to enrol and study the Faculty for one semester up to one year. Some courses will necessitate industrial placements to be completed. Social and cultural programmes are organised to complement the learning experience along with field trips and industry visits. Upon completion of the course, you will receive a transcript and credits may be awarded to your programme of study at your home institution.

STUDY TOUR ABROAD

Cultural Exchange Programme

The programme offers many diverse opportunities for student to travel the world. As an alternative to education, this programme also enables you to visit multiple countries and enjoy unique educational experience outside the classrooms through our curriculum that involves several field trips and industry visits.

STUDY TOUR

Experiential Learning Programme

Experiential learning is the process of learning through experience and is more specifically defined as learning through reflection on doing. The Faculty provide several experiential learning opportunities to students outside the classroom as part of our curriculum in organising field trips and industry visits.

FIELD TRIPS

Visit museums, archaeology sites, historical places, national and theme parks, farms, bakeries, factories, etc.

INDUSTRY VISITS

Visit restaurants, hotels, convention centres, ministries, government offices, NGO etc.

CAREER DEVELOPMENT CELL

We are strive to develop campus life by providing opportunity for personal growth and leadership development to all students. This is accomplished by giving freedom of expression, social interaction and active participation for all students. Students input, opinion and action are highly appreciated.

STUDENT'S CLUB

The student's club is aimed at encouraging togetherness by organizing various campaigns, activities and events that help students in pursuing their career goals, while installing strong values and principles in them.



"I am a BIT student of 7th Semester, who is very open to new varieties of opportunities the future may hold. The search of the best bsc computing college, quality education, high ranked affiliations and academic reputation led me to IIMS. The fact that it provides holistic approach to learning and the practise of problem and activity based learning had enticed me even more to the college since the very beginning. Lastly, I am highly elated to be the student of the prestigious college where the studies reaches beyond achieving isolated credits.

Shreyasha Baskota

BIT, 2019 Batch



HamroLMS

IIMS Learning System

IIMS Learning System is a web portal system that provides all students with individualized web services and information – all from one simple login point. Once student logged in into the system, the system will act as a gateway to all the resources required for students. The main features of LMS includes records of attendance, assignments, notices, messaging system, discussion forum, downloading course resources, individual course activities, uploading and downloading files and resources which facilitates an effective teaching-learning platform.

IIMS LEARNING TOOLS



turnitin



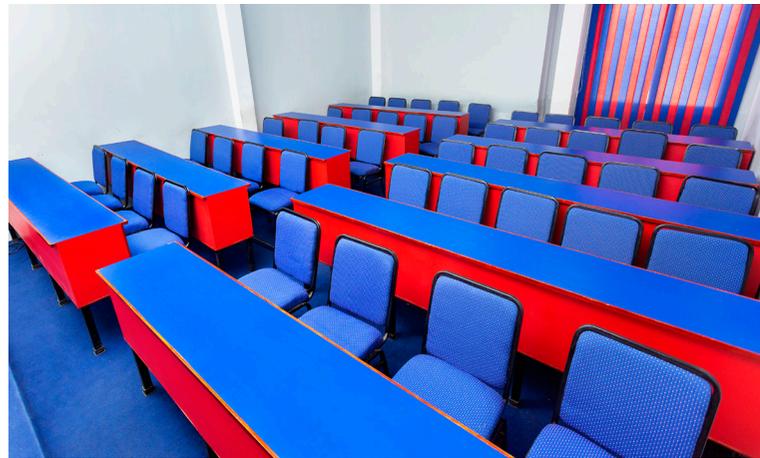
Google Classroom



Digital Library



INFRASTRUCTURE & FACILITIES







Italian Cuisine



Hotel Visit



Cycling



IIMS Holi Blast



Community Work



Blood Donation



Prom Night



Career Talk



IIMS Dashain Carnival





One Day Workshop



Mixology Training



MEXIARA



Sport Week



Saraswati Puja



Guest Lecture



International Cuisine



Newari Bhoj



Community Work



Excursion



Cultural Food TEST

KNOW YOUR **BENEFITS OF GRADUATING** ONE YEAR BEFORE **YOUR FRIENDS DO**



WITH MORE THAN **2,355** GLOBAL CORPORATE PARTNERS,
UCSI UNIVERSITY HAS THE **LARGEST** INDUSTRIAL PLACEMENT PROGRAMME



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