

2025/26

Softwarica
COLLEGE OF IT & E-COMMERCE

in collaboration with
Coventry
University 

programme prospectus



www.softwarica.edu.np

Create Innovate Achieve



Welcome Onboard

for a transition from a student
to an industry-ready graduate.

About our University Partner

Coventry University is a global, modern university with a mission of creating Better Futures. Founded by entrepreneurs and industrialists in 1843 as the Coventry School of Design, the university continues to have strong links with the public and private sectors, providing job-ready graduates with the skills and creative thinking to improve their communities.

Coventry University's commitment to providing innovative teaching, cutting-edge facilities, and a vast international network really sets it apart. With its pioneering 5G network and digital learning community, students can experience a future-focused education. The global reach—spanning more than 30 countries and 150 higher education partnerships—gives students unique opportunities to connect and collaborate internationally.

The university's focus on impactful research, especially in partnership with businesses and communities, aligns with its mission to solve real-world problems and foster growth. It's exciting that Coventry is not just focused on traditional academic success but on transformational change that directly benefits students and the broader global community.

Their expansion into cities like London, Dubai, Singapore, and even African countries makes it a truly global institution, offering diverse experiences for its students. The emphasis on hands-on learning and real-world applications seems perfect for anyone looking to stay ahead in the rapidly changing tech and business landscapes.

The King's Awards for Enterprise, formerly known as The Queen's Awards for Enterprise, is an awards program that honors British businesses and organizations that excel in international trade, innovation, sustainable development, or promoting opportunity (through social mobility).

Coventry University's notable international success has resulted in the institution being awarded the Queen's Award for Enterprise, the highest official UK honor for British businesses.

Coventry University collaborates with over 150 higher education providers globally, equipping students with the skills and knowledge necessary to achieve their ambitions, no matter where they study.

Coventry University's Global Hubs offer organizations and individuals around the world regional access to the expanding academic, research, and commercial expertise available across all areas of the Coventry University Group.



University Rank

Coventry University

**Shortlisted for
University of the year**

*The Times and Sunday Times
Good University Guide 2021*

Coventry University

**5 QS Stars
Overall Rating**

QS Stars University Ratings

Coventry University
**Top 100 in the World
'International outlook'**

THE World University Rankings 2022

Coventry University
**No.23 in World for
'International outlook'**

THE Young University Rankings 2022

Coventry University
**No.17 for Information
Technology and Systems**

The Complete University Guide 2025

Coventry University
**Employed in graduate role
or further study(15 months
after graduation)**

Guardian University Guide 2024

Coventry University
**No. 3 in UK for
Students Overseas**
*In-person Delivery of Coventry TNE
programmes with an overseas
institution {HESA 2021}*

Coventry University
**No.1 in England HEIs
for Learning Opportunities
in Information Systems**

National Student Survey(NSS) 2024

About our College

Softwarica College is working in collaboration with Coventry University, UK, offering a range of undergraduate and postgraduate programmes including BSc (Hons) Software Engineering, BSc (Hons) Ethical Hacking and Cyber Security, BSc (Hons) Computer Science with AI, and MSc Data Science and Computational Intelligence.

Over the decades in the industry, our college has always intended to groom students with a modern and hands-on learning approach aiming to produce industry-ready graduates. The college focuses on providing IT education with an accurate blend of real-life skills for holistic development and to show the pathway for a better career to the students for which classes on personality development and soft skills are equally prioritized.

Our college gives students exposure to the entrepreneurial world, the students are encouraged to innovate the products and showcase them on various platforms to reach a mass audience. Adding to this, the guidance and support straight from the experts makes the project more reliable and realistic.

On the other hand, the college opens the gate for the students to start their career as an employee in the locally and globally known national and international standard companies.

With a 100% employment rate among 3500+ alumni, our college has successfully developed market-ready graduates spread across the world.

The college infrastructure has been built accordingly to deliver the ideal place where students get a real-time experience of the IT industry. The well-equipped computer labs, technical and networking labs, and an extensive collection of books about IT and business, and expert teaching faculties make the experience of students worthy.

The three years of commitment from the prospective student is all our college needs to guarantee an extraordinary academic journey for their holistic development. The academic journey here caters to the tech-savvy and enthusiast students with regular assignments, report writing, field visits, research, group discussions, and presentations are basic features of program delivery.

With a vision to provide real-time work experience, after completion of the course, students are provided with opportunities with renowned companies in Nepal and abroad in positions best suited to their skill level. Hence, the students that graduate from Softwarica, are the best IT professionals in the Nepali Tech Sector and have no problem scoring numerous IT opportunities.

Programmes Offered

**Approved by
Ministry of Education
Nepal.**

BSc (Hons) Computer Science with AI
3 years

BSc (Hons) Ethical Hacking and Cybersecurity
3 years

BSc (Hons) Software Engineering
3 years

MSc
Data Science and
Computational Intelligence
2 years

Intakes-

Autumn & Spring



OUR COURSES

BSc (Hons) Computer Science with AI

The Computer Science with AI course combines foundational computer science with a focus on Artificial Intelligence, covering areas like software development, database maintenance, and emerging AI fields. Emphasizing computational thinking and practical programming, students explore AI techniques, system architecture, and data science using modern machine learning algorithms.

The curriculum includes industry tools, ethical considerations, and collaborative projects, preparing graduates for diverse careers or further studies. Upon completion, students gain a well-rounded skill set, positioning them for success in the evolving tech landscape.

Intake
Autumn / Spring

Duration
3 years full-time

Credits
360 points

Entry Requirements:

A student must have obtained at least 2.4 GPA or equivalent marks in the 10+2 level.

A student must complete A level with at least 3.5 credits with minimum 2 subjects in A2 level.

Must fulfill the English requirement as per the rule of the college.

Year One

Semester - I	Programming: Concepts and Algorithms
	Mathematical Skills for Computing Professionals
	Computer Systems

Semester - II	Programming: Professional Practice
	Working with Data
	Integrative Project

Year Two

Semester - III	Software Engineering
	Theory Of Computation
	Advanced Algorithms

Semester - IV	Operating Systems, Security, and Networks
	Data Science
	Artificial Intelligence

Year Three

Semester - V	Project Discovery
	Machine Learning
	Robots and Intelligent Agents
Semester - VI	Artificial Neural Networks
	Security
	Dissertation and Project Artefact

OUR COURSES

BSc (Hons)

Software Engineering

The BSc (Hons) Software Engineering degree is a 3-year program, relevant course designed to deliver outstanding student experience, retention and satisfaction. It positioned as applied and strongly vocationally driven by the current needs of industry, with intended learning outcomes which are based directly on those needs. This makes it different from other degrees offered by competitor institutions, locally, nationally and internationally.

Tailored for the Nepalese market the course offers a multifaceted approach to education, focusing on foundational principles and cutting-edge industry practices. At its core, the curriculum emphasizes computational thinking, providing students with the ability to craft algorithmic solutions to diverse challenges.

Intake
Autumn / Spring

Duration
3 years full-time

Credits
360 points

Entry Requirements:

A student must have obtained at least 2.4 GPA or equivalent marks in the 10+2 level.

A student must complete

A level with at least 3.5 credits with minimum 2 subjects in A2 level.

Must fulfill the English requirement as per the rule of the college.

Year One

Semester - I

Programming: Concepts and Algorithms

Mathematical Skills for Computing Professionals

Computer Systems

Semester - II

Programming: Professional Practice

Working with Data

Integrative Project

Year Two

Semester - III

Web Development

Software Engineering

Advanced Algorithms

Semester - IV

People and Computing

System Analysis and Design

Data Science

Year Three

Semester - V

Project Discovery

Web API Development

Mobile Application Development

Semester - VI

Dissertation and Project Artefact

Security

User Experience Design

OUR COURSES

BSc (Hons)

Ethical Hacking & Cyber Security

This course offers a balanced blend of practical experience and theoretical understanding in cybersecurity, ethical hacking, digital forensics, and core computer science principles. Our standardized labs enhance the learning process, providing students with a realistic environment to develop their skills.

Graduates of this course are well-prepared to pursue careers as cybersecurity analysts, penetration testers, forensic analysts, security consultants, or security researchers. With their comprehensive education and practical training, they are equipped to make meaningful contributions to the ever-evolving field of cybersecurity and address the challenges of today's digital landscape.

Intake
Autumn / Spring

Duration
3 years full-time

Credits
360 points

Entry Requirements:

A student must have obtained at least 2.4 GPA or equivalent marks in the 10+2 level.

A student must complete A level with at least 3.5 credits with minimum 2 subjects in A2 level.

Must fulfill the English requirement as per the rule of the college.

Year One

Semester - I	Introduction to Programming
	The Ethics and Legal Framework of Cyber Security
	Foundations of Computer Science

Semester - II	Cyber Security Fundamentals
	Networking and Computer Architectures
	Information Security Management

Year Two

Semester - III	The Internet and Web Technologies
	Digital Forensics
	Programming and Operating Systems

Semester - IV	Security Operations
	Foundations of Networking
	Practical Penetration Testing

Year Three

Semester - V	Digital Security Risk and Audit Management
	Reverse Engineering and Exploit Development
	Research Project Preparation

Semester - VI	Advanced Penetration Testing
	Applied Cryptography
	Research Project Delivery

MSc

Data Science & Computational Intelligence

This master's course aims to respond to the demand for data scientists with the skills to develop innovative computational intelligence applications, capable of analyzing large amounts of complex data to inform business decisions and market strategies.

This course provides advanced theoretical and practical subjects across a range of specialist areas in data science and computational intelligence which are greatly demanded in a wide range of research and industrial application. The course preliminary focuses on enhancing the awareness with regards to professional, legal, ethical, and social issues along with commercial risk and management in the role of a data science professional and enables students to adapt to future changes in technology about data science and computational intelligence areas.

Intake
Autumn / Spring

Duration
2 years full-time

Credits
180 points

Entry Requirements:

Students who have graduated in relevant computing field with a score of 60%. However, at least of one year of experience in relevant field should be accounted for.

For students graduated from Bachelors of Science at least of 1 years experience in IT field is required.

Machine Learning - 15 credit

Applications of machine learning, supervised / unsupervised learning, linear regression, logistic regression, regularisation, support vector machine, decision trees, reinforcement learning, etc.

Artificial Neural Networks - 15 credit

Supervised and unsupervised neural networks, static and temporal neural networks, deep neural networks, hybrid and modular neural networks, various neural networks and their applications.

Introduction to Statistical Methods For Data Science - 15 credits

Use of range of statistical distributions like binomial, poisson, uniform, normal, exponential, gamma, etc. Multivariate distributions, central limit theorem, hypothesis testing, bayesian inference, regression models, etc.

Big Data Management and Data Visualisation - 15 credit

Analytical review of database system and big data, traditional database concepts for structured data, big data methodologies for structured and unstructured data sets, big data analysis using examples from real life case studies and datasets, big data processing and predictive frameworks and data visualisation tools to support decision-making.

Data Management Systems - 15 credit

Database modelling, relational models, big-data, nosql databases, database programming, distributed databases, transaction management, etc.

Intelligent Information Retrieval - 15 credit

Search engines, web crawlers, query processors, boolean model, text classification, document clustering, link analysis, multimedia information retrieval, etc.

Advanced Machine Learning - 15 credit

Gaussian processes, dirichlet processes, graphical models, fuzzy sets, adaptive and hybrid fuzzy systems, evolutionary algorithms.

Individual Research Project Preparation - 15 credit

Research skills, research methodology, reporting, legal, ethical and social context

Computing Individual Research Project - 60 credit

Prepare a project to solve a practical industry problem. Investigate and research core activities, leading to analysis, final summations and insightful recommendations. Culminate a comprehensive, thorough and professional report, documenting the approach, conduct and outcomes of the project, critical review of the project conduct and management.

THE EXPERIENCE

International **Exposure**

Coventry University Immersion and London Programme Tour.

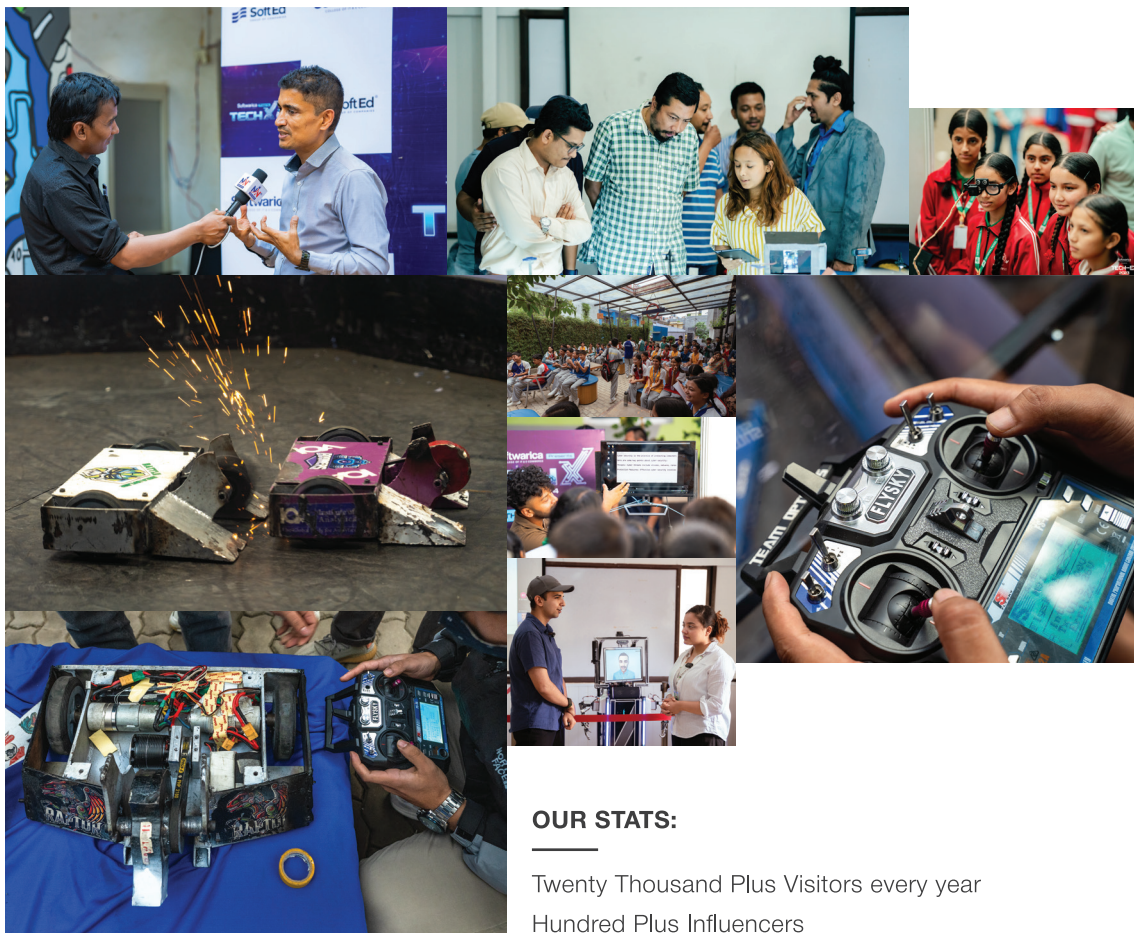
The senior batch competes for the opportunity to grab hands-on practical experience of the UK education method through lecture classes, workshops, and group discussions. Along with this experience, the students will observe the major tourists attraction places of UK. The college sponsors an annual immersion and London tour program, offering students exposure to the global scope of IT.

The students who represent the college in various programs, and have at least 90 percent attendance in each module will be selected through different rounds.



THE TECH X

As an institution dedicated to academic excellence and innovative learning, Softwarica College has been organizing exhibitions annually to promote the outstanding work of its students. Our Marquee Event termed as the "Tech Expo," stood out as a remarkable testament to the college's commitment to nurturing talented individuals and fostering a culture of technological innovation.



OUR STATS:

Twenty Thousand Plus Visitors every year
Hundred Plus Influencers

Aside from Tech X in 2023; we are facilitating Robo Warriors League. The Robo Wars has proven to be more than just a competition: it's a platform where students come together to collaborate, innovate and learn in a dynamic environment - fostering teamwork, problem-solving and technical proficiency.

ACHIEVEMENTS



2025

Go-Kart Racing at MechTRIX 2081
IOE Pulchowk, Nepal



2024

ROBO Wars EEPEX 24 Hosted by the
Kathmandu University, Nepal



2024

Recursion Hackathon Hosted by the
COSMOS College, Nepal



2023

Capture the Flag,
Threat CON, ALL POSITIONS



2024

Venture Quest Organized by the
Malpi College, Nepal



2024

Biz Fest Organized by the
Prime College, Nepal



2023

Capture the Flag Hosted by the
United Tech Fusion



2023

HEX Genius Hackathon Hosted by the
Himalayan College of Engineering



2023

Black Hat MEA Onsite Competition
37th Position among
3000 competitors worldwide.
(Global Cybersecurity Event
hosted in Saudi Arabia)



Creating & Empowering Global Tech Industry Leaders.

Experience world class education
right here in Nepal.

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programme prospectus

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Information is correct at the time of printing January 2025,
however, changes may occur. Check our website,
www.softwarica.edu.np or contact us on (+977)-1-4517190
for most up-to-date information.

www.softwarica.edu.np

This document is available in other formats on request.

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