BSc (Hons) in Computer Science

Developing graduates with solid theoretical knowledge, analytical ability, and practical competence.

Career Integrated | **Industry Placement** | **130+ Credits**

WHY STUDY COMPUTER SCIENCE AT UTE?

The Bachelor of Science (Honors) in Computer Science at UTE is designed to prepare students for careers in the rapidly growing digital economy. The program combines strong theoretical foundations with hands-on practical learning, industry internships, innovation, and entrepreneurship.

STUDENTS DEVELOP EXPERTISE IN:

- Software Engineering
- Artificial Intelligence (AI)
- Data Science & Big Data Analytics
- Cybersecurity & Ethical Hacking
- Cloud Computing & DevOps
- Full-Stack Web Development
- Mobile Application Development
- Networking & System Administration
- Emerging Technologies

The curriculum is designed based on Outcome-Based Education (OBE) principles and is aligned with Level 6 of the Cambodia Qualifications Framework, as well as international standards.

PROGRAM HIGHLIGHTS:

Industry-Focused Curriculum

Learn modern technologies and tools used by today's technology companies.

Practical Learning Approach

- Hands-on laboratories
- Coding projects
- Internships
- Capstone
- Projects
- Startup innovation.

Internship & Industry Placement

Gain real workplace experience through professional internships and industry collaboration.

Thesis OR Startup Business Plan

Students may graduate by completing:

- Research Thesis OR
- Technology Startup Business Plan

Future-Ready Specializations

Choose specialization pathways in:

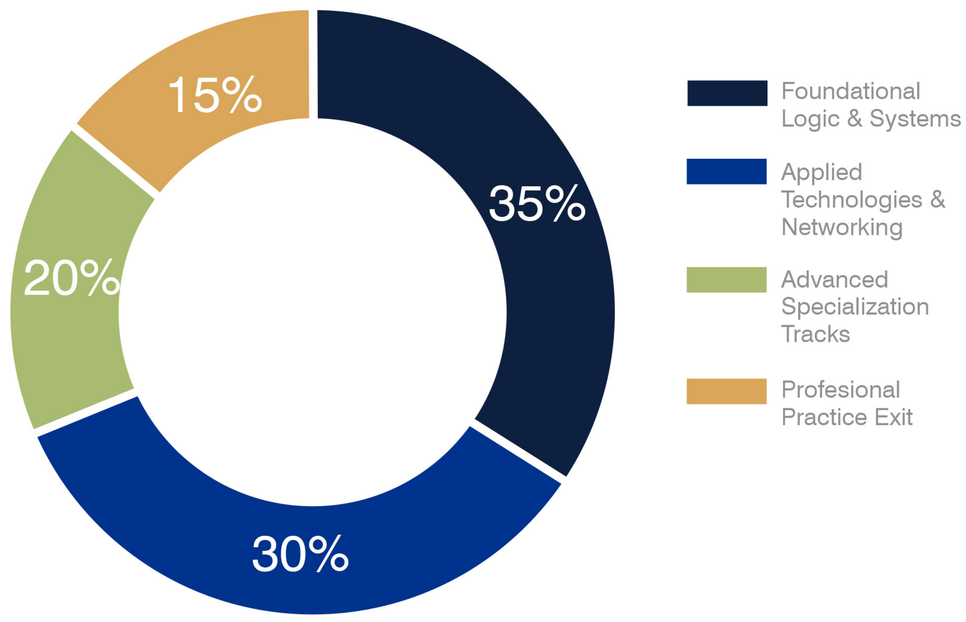
- Artificial Intelligence & Data Science
- Cybersecurity & Cloud Computing
- Software Engineering & Web Technologies

UTE UNIVERSITY of TECHNOLOGY & ENTREPRENEURSHIP
(+855) 17 592 888 / 70 592 888
www.ute.ac
info@ute.ac

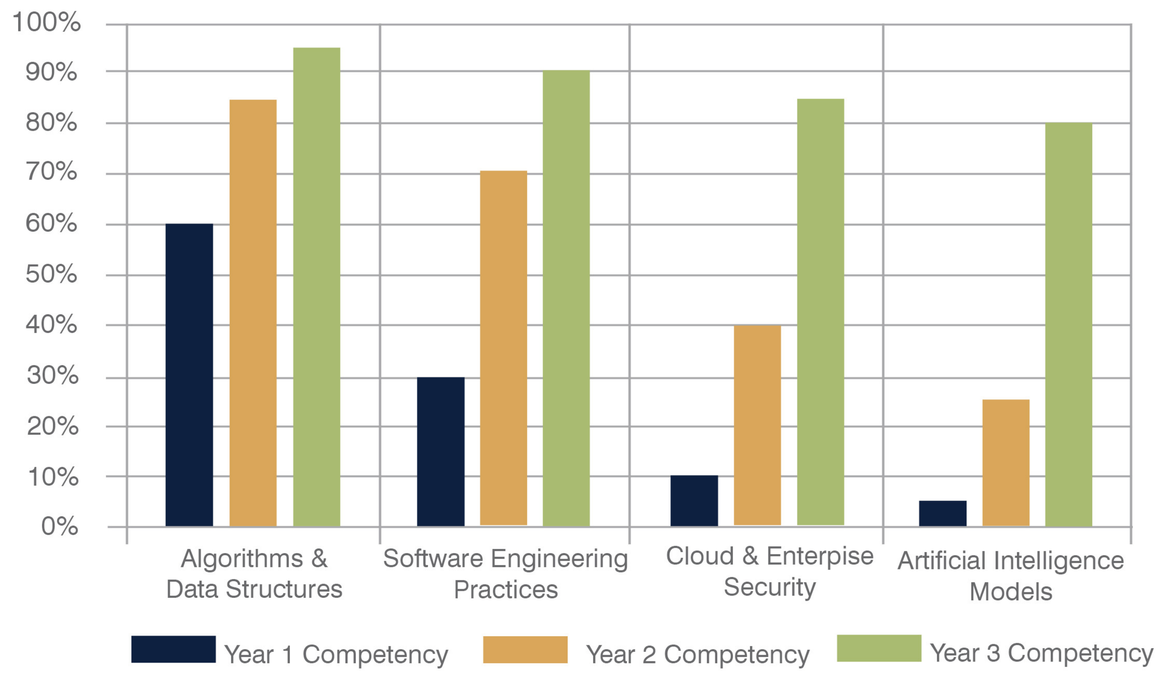
COMPUTER SCIENCE MASTERY PATHWAY

A STRUCTURED, TERM-BY-TERM APPROACH TO MASTER THEORETICAL CONCEPTS BEFORE APPLYING THEM TO PRACTICAL, INDUSTRY-STANDARD TECHNOLOGY STACKS.

CURRICULUM COMPOSITION



TECHNICAL SKILL PROGRESSION



THE ACADEMIC ROADMAP

YEAR 1
Foundation in Systems

Terms 1-3 focus on Moral Philosophy, Math for Computing, OOP I & II, and Database Fundamentals.

48 Credits | C++ / Java

YEAR 2
Building Core Science

Term 4 introduces Programming Fundamentals in Python, System Administrator, Expert Networking, and Cyber Fundamentals.

Applied Tech | Python

YEAR 3
Specialization Tracks

Students branch into specific high demand verticals such as AI & Big Data, or Cybersecurity & Cloud Computing.

Deep Learning | DevSecOps

THE FINAL EXIT: PROFESSIONAL PRACTICE & INNOVATION

Upon completion of the core curriculum, students must choose one of two distinct paths to qualify for graduation. Both paths require a formal defense.

ACADEMIC RESEARCH THESIS

Designed for students aiming for research-heavy roles. This track focuses on contributing new knowledge to the field of Computer Science through rigorous methodology.

REQUIREMENT 8,000-word Thesis & Viva Voce.

OR

STARTUP BUSINESS PLAN

Designed for aspiring entrepreneurs. Students develop a full technical prototype (MVP) along with a comprehensive market analysis, financial model, and growth strategy.

REQUIREMENT Functional MVP & Investor-Ready Pitch Deck.

CAREER OPPORTUNITIES

Graduates may pursue careers as:

- Software Engineer
- Full-Stack Web Developer
- Mobile Application Developer
- AI Engineer
- Data Analyst / Data Scientist
- Cybersecurity Analyst
- Cloud & DevOps Engineer
- Systems Analyst
- Network Administrator
- Systems Administrator
- Content Management System/ UI/UX Developer
- Technology Entrepreneur