



# MOULDING THE FUTURE OF TECHNOLOGY FOSTERING LEADERS, THINKERS, AND INNOVATORS



Be at the forefront of the AI revolution at the College of Computing and Data Science (CCDS). Be ready to challenge yourself to explore bold ideas and solve complex problems for the greater good. Be the innovator, the visionary, and the leader who shapes a better, more equitable future through technology.

Advance your IT career with the Bachelor of Technology in Computing, a part-time SkillsFuture Work-Study Degree (WSDeg).

Designed for working professionals, this programme empowers you to:

- Unlock new growth opportunities in IT
- Gain industry-focused, practical knowledge
- Enhance and validate your expertise
- Transition into impactful IT roles
- Study flexibly with minimal work disruption



## DISCOVER THE CCDS DIFFERENCE

### GLOBAL RECOGNITION FOR EDUCATIONAL EXCELLENCE

U.S. News & World Report Best  
Global Universities 2024

**#2**

for Artificial  
Intelligence

**#2**

for Computer  
Science

QS World University  
Rankings 2024

**8th**

for Data Science  
and Artificial  
Intelligence

**9th**

for Computer  
Science and  
Information  
Systems

**TOP  
20**

in Computing on  
**Times Higher  
Education  
Rankings 2025**

**TOP  
10**

Best AI And Data  
Science Undergraduate  
Programmes on  
**Forbes' 2021**

### WORLD-CLASS LEARNING EXPERIENCE



Globally recognised  
expert faculty.



Cutting-edge, industry-  
relevant curriculum.



World-class research  
and learning facilities.



Experiential learning  
through competitions  
and projects.



Professional  
internships and industry  
attachments.

## PROGRAMME OVERVIEW

The Bachelor of Technology in Computing follows a structured, three-tier, stackable model designed to support progressive learning and industry readiness. Students earn an Advanced Specialist Certificate upon completion of each of the first two stacks. The final stack, Industry Immersion, comprises full time On-the-Job Training (OJT) in the student's specialist area, an industry capstone project, and three Broadening and Deepening Electives (BDEs).

	PROGRAMME STRUCTURE	QUALIFICATION			
1 YEAR	<b>3. INDUSTRY IMMERSION STACK</b> <ul style="list-style-type: none"> <li>• Full-time On-the-Job training (OJT)</li> <li>• Company-sponsored Final Capstone (by OJT company)</li> <li>• Broadening &amp; Deepening Electives (BDEs) (school and/or industry training)</li> </ul>	<b>BACHELOR OF TECHNOLOGY IN COMPUTING</b>			
1.5 YEARS	Students must select <b>ONE</b> of the following <table border="1" style="width: 100%; text-align: center;"> <tr> <td>SOFTWARE ENGINEERING</td> <td>AI ENGINEERING</td> <td>CYBERSECURITY</td> </tr> </table>	SOFTWARE ENGINEERING	AI ENGINEERING	CYBERSECURITY	<b>ADVANCED SPECIALIST CERTIFICATE IN SOFTWARE ENGINEERING or AI ENGINEERING or CYBERSECURITY</b>
SOFTWARE ENGINEERING	AI ENGINEERING	CYBERSECURITY			
1.5 YEARS	<b>CORE MODULES</b> <ul style="list-style-type: none"> <li>• Computer Design</li> <li>• Programming &amp; Software Development</li> <li>• Operating Systems</li> <li>• Databases</li> </ul>	<b>ADVANCED SPECIALIST CERTIFICATE IN FULL-STACK DEVELOPMENT</b>			

## ADMISSION CRITERIA

### ACADEMIC

- Singapore-Cambridge GCE A-Levels
- Polytechnic Diploma or equivalent institutions
- NUS High School (NUSHS) Diploma
- International Baccalaureate (IB) Diploma
- Other recognised qualifications

### PRE-REQUISITE

- Successful completion of the following bridging modules:
  - Linear Algebra & Calculus for Computing
  - Discrete Mathematics for Computing
  - Probability & Statistics for Computing
  - Introduction to Computational Thinking and Programming
  - Introduction to Computer Systems

These bridging modules are carefully curated to enhance foundational knowledge and prepare students for the academic rigour of a computing degree. It allows applicants to evaluate their readiness for the Bachelor of Technology in Computing programme, ensuring a well-informed transition into a professional computing career.

## ADDITIONAL REQUIREMENTS

- At least 21 years of age as at 31 July of admission year AND
- At least **TWO** years full-time working experience OR
- Currently engaged in full-time employment\* OR
- Completed full-time National Service\*\*

\*Part-time employment will not be considered as full-time working experience. Applicants who are self-employed may be required to submit additional documents for evaluation and verification.

\*\*Full-time NSMen (NSF) are not eligible for disruption of service to pursue this part-time degree programme.

## EXEMPTIONS

Applicants who are younger than 21, or who do not have two years of full-time working experience may be granted exemptions if they are either:

- Company sponsored OR
- Currently employed in an IT related job role/ sector.

## CAREER PROSPECTS

Graduates of the Bachelor of Technology in Computing (WSDeg) programme are equipped with industry-relevant skills, opening doors to diverse and rewarding career opportunities in the tech sector.

### Key Career Opportunities:

- AI/ML Engineer
- Cyber Risk Analyst
- Data Engineer
- Full Stack Developer
- Security Engineer
- Software Engineer



Join NTU's College of Computing and Data Science and be the **INNOVATOR**, the **VISIONARY**, and the **LEADER** you are meant to be!

## CONNECT WITH US



[ntu.sg/BTech](https://ntu.sg/BTech)

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