



Advanced Computing for Executives
School of Computing



**CHIEF DATA, ANALYTICS
AND AI OFFICER PROGRAMME**

32 Weeks | Recorded + Live online

Programme Summary

Chief Data, Analytics and AI Officer programme

**Institute Name**

NUS School of Computing

**Programme Duration**

32 weeks

**Cost**

US\$10,000

**Learning Mode**

Online-pre-recorded video lectures and live faculty sessions

**Weekly Effort**

4-6 hours/week

**Faculty**

NUS faculty

**Guest Faculty/
Industry Experts**

Senior industry practitioners

**Certificate**

Upon successful completion of the programme, participants will be awarded a verified digital certificate by NUS School of Computing.

Learning Experience

- **Prerecorded videos with NUS School of Computing Faculty-** Learn at your own pace, around your busy schedule.
- **World-class faculty-** Learn from the best faculty.
- **High-quality videos-** Enjoy a great learning experience, even when on the move
- **On demand learning-** Rewatch any lesson/concept for deeper understanding.

Frequently Asked Questions

Are there any live sessions with the institute faculty in this programme?

Yes, there are pre-recorded video lectures from NUS faculty for self-paced learning interspersed with live lectures from renowned NUS faculty and industry practitioners.

Who grades/gives inputs on the assignments and projects?

Assignments will be graded by industry practitioners who are available to support participants in their learning journey and/or by the Emeritus grading team

What if I miss the assignments for a particular week? Can I attempt them later?

An assignment that is not submitted by the due date is late. Late assignments will be accepted until one week after the programme end date, which is published on the programme homepage.

Who is the faculty for the live masterclass/online sessions/doubt-clearing sessions?

Doubt-clearing sessions are carried out by the Success Coaches, as they monitor individual student progress.

Will the Institute/Emeritus help with placement services?

This programme is designed with some of the best faculty to cover relevant topics in a manner that creates positive career outcomes. As an additional service, we provide resume writing guidance, help with looking for jobs and interview preparation, but we do not offer placement services

What if I don't find the programme appropriate for me after starting the sessions? Can I seek a refund?

We encourage our learners to complete the programme to fully understand the concepts and derive valuable learning outcomes. Should you still feel the need to stop your learning journey, a refund request can be initiated within 7 days from date of payment. However, after 7 days the programme fee becomes non-refundable.

What type of certificate will I receive?

Upon successful completion of the programme, you will receive a smart digital certificate. This can be shared with friends, family, schools or potential employers. You can use it on your cover letter, resume and/or display it on your LinkedIn profile. The digital certificate will be sent approximately two weeks after the programme, once grading is complete.

How long will I have access to the learning materials?

You will have access to the online learning platform and all the videos and programme materials for 12 months following the programme end date. Access to the learning platform is restricted to registered participants per the terms of agreement.

Why is the Chief Data Officer role relevant?

When managed well, data can increase value and decrease costs. But many organisations struggle to evolve their data management strategy to meet business objectives. As the Asia-Pacific (APAC) market emerges as the new hub for AI and data centres, APAC leaders are rapidly adapting their data strategies and embracing trends such as data observability and applied AI to achieve business goals.

This is where a Chief Data Officer (CDO), who can infuse data strategy, risk and compliance with business, can play a valuable role. However, despite the fast-paced acceleration and demand, the penetration of a CDO in APAC remains low at 6 percent ([PwC](#)).

A Chief Data Officer can turn exponentially increasing data into a business asset and unlock value.

That is why NUS SoC has launched the Chief Data, Analytics and AI Officer programme to help you harness the power of data, analytics and AI to infuse data-driven growth strategy for stronger performance. Taught through case studies, practical examples and a capstone project, this programme will equip you with an in-depth understanding of data management, emerging technologies and innovation to pioneer organisational decision-making. Tackle inefficiencies, steer problem-solving and navigate your organisation towards success with this programme.

89 percent of CEOs in APAC are integrating AI into their capital allocation: EY Outlook Pulse Survey Report, 2023

Around **75 percent of large APAC organisations** aim to integrate AI-infused processes by 2026 for enhanced efficiency and quality: International Data Corporation, 2023

Gartner predicts that by 2026, organisations that develop trustworthy, purpose-driven AI will see over **75 percent of AI innovations** succeed, compared to 40 percent among those that do not, Gartner 2023

The APAC AI market size is expected to reach **US\$928.9 billion** by 2032: Spherical Insights 2023

Programme Highlights



Earn a certificate from Asia's highest-ranking institute.



Benefit from a comprehensive curriculum, case study-based approach and application-based assessment to enhance critical thinking and apply theoretical concepts to real-life problems.



Live faculty sessions from world-renowned faculty.



Campus experience and Networking event to enhance your technical proficiency and leadership abilities.



Associate Alumni status and Benefits including invitations with numerous benefits.



A 2-week capstone project to help you unlock tech-based opportunities and innovations.

- Note: - **This is a majorly self-paced online programme with some live sessions with programme faculty. Post session video recordings will be available for up to 12 months after programme completion. We have a curated panel of eminent industry practitioners who will be conducting the weekly live doubt-clearing sessions.*
- *Assignments are graded either by industry practitioners who are available to support participants in their learning journey and/or by the Emeritus grading team. The final number of quizzes, assignments and discussions will be confirmed closer to the programme start.*
 - *For the on-campus networking sessions participants will be responsible for making their own travel and accommodation arrangements.*

3rd

ranked NUS in Asia as per QS ranking 2024

8th

in the world as per QS ranking 2024

3rd

ranked NUS in Asia in data science as per QS ranking 2023

11th

in the world in data science as per QS ranking 2023

High-level Programme Outcomes



Evaluate strategic implications and innovative value generation through proficient data management



Analyse strategies for capitalising on data monetisation



Explore innovation and emerging technologies in the domain



Examine cyber risk through proficient application of data analytics and ethical considerations, resulting in effective management of risks and compliance



Empower the team through the acquisition of advanced leadership proficiencies in team management, negotiation, influence, and change management

Modules

Phase 1 Data Management

- ▶ Data Governance and Strategy
- ▶ Data Engineering and Integration
- ▶ Data as an Asset for Monetisation
- ▶ Data Visualisation and Storytelling

Phase 2 Data and AI-Driven Growth Strategies

- ▶ Strategic Thinking for Organisation Growth
- ▶ Using Data Science and Analytics to Drive Marketing and Sales Strategies
- ▶ AI changing the Value of Organisations and Businesses
- ▶ Financial Planning and AI-Driven Strategies
- ▶ Data-Driven Digital Transformation
- ▶ Innovating New Opportunities

Phase 3 Emerging Technologies

- ▶ Analytics for Business Intelligence
- ▶ Advanced Data Science and Machine Learning
- ▶ Automation with AI
- ▶ Generative AI
- ▶ Prompt Engineering
- ▶ Cloud Computing
- ▶ Cybersecurity

Modules

Phase 4 Risk Management

- ▶ Cyber Risk Management
- ▶ Compliance and Intelligence/Surveillance with AI
- ▶ Data and Analytics, and the Use of AI for Risk Management

Phase 5 Executive Presence- Leadership

- ▶ Team Management
- ▶ Influence with Effective Communication
- ▶ Change Management

Campus Experience and Networking Event

Participants will be invited to attend Campus experience and Networking opportunity at the end of the programme journey at NUS SoC campus. During this event, participants will have the opportunity to network with fellow global leaders, listen to talks, visit NUS research centres, and interact with programme faculty/director and industry practitioners.

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- 2. Assignments are graded either by industry practitioners who are available to support participants in their learning journey and/or by the Emeritus grading team. The final number of quizzes, assignments and discussions will be confirmed closer to the programme start.*
- 3. For the on-campus networking sessions participants will be responsible for making their own travel and accommodation arrangements*

Who Is This Programme For?

Develop data leadership skills in the age of AI.



Seasoned executives eager to champion AI strategies and leverage data as a key asset to spearhead sustainable and profitable growth



Senior professionals with a working knowledge of data management who want to foster innovation through the power of data, analytics and AI to propel business expansion and assume CXO positions



Business leaders looking to explore latest tech-based opportunities to drive digital innovation and long-term strategic growth



Faculty



A/Prof Thomas Chevrier

Adjunct Professor
(Department of Information
Systems & Analytics)



Samantha Sow

Senior Lecturer
(Department of Information
Systems & Analytics)



Dr Yeo Wee Kiang

Senior Lecturer (Department
of Information Systems &
Analytics)



Dr Yang Lu

Lecturer (Department of
Information Systems &
Analytics)



Loh Yong Chye

Adjunct Lecturer
(Department of Information
Systems & Analytics)



Dr Amirhassan Monajemi

Senior Lecturer
(Department of
Computer Science)

Faculty



Dr Ai Xin

Lecturer (Department of
Computer Science)



Dr Ganesh Neelakanta Iyer

Lecturer (Department of
Computer Science)



A/Prof Chia Chien Wei

Adjunct Associate Professor
(Department of Industrial
Systems Engineering &
Management, CDE)



Ang Leong Boon

Executive Education Fellow
(Advanced Computing for
Executives)



Dr Charles Phua

Executive Education Fellow
(Advanced Computing for
Executives)



Dr Dennis Khoo

Executive Education
Fellow (Advanced
Computing for
Executives)

Faculty



Dr Guo Lei

Executive Education
Fellow (Advanced
Computing for
Executives)



Tan Tzann Chang

Executive Education Fellow
(Advanced Computing for
Executives)



Teo Chin Seng

Executive Education Fellow
(Advanced Computing for
Executives)



About NUS School of Computing

The NUS School of Computing (SoC) traces its roots back to the Nanyang University Department of Computer Science that was established in 1975 – the first of its kind in Singapore. Since then, we have developed into one of the top 10 computing schools in the world, with faculty members who are both internationally recognised researchers and inspiring teachers.

We offer outstanding undergraduate and graduate degree programmes across the full spectrum of the field of computing, including computer science, information systems, computer engineering, business analytics and information security, as well as specialisations in emerging areas of importance, such as AI, fintech, blockchain, analytics and cybersecurity. Correspondingly, we attract excellent students and produce talented graduates who are making their mark in the world.

The exceptional education that students experience here, coupled with the demand for computing talent in all fields and industries, makes NUS Computing graduates highly sought after. We instil our students with leadership qualities and a spirit of entrepreneurship through mentorship, community service initiatives and special programmes, including The Furnace, a start-up incubator that offers funding, infrastructure and management support to bring original ideas to commercial fruition.

The NUS SoC Advanced Computing for Executives (ACE) was established to help business leaders and computing professionals learn about emerging technology and leverage it for digital transformation and business competitiveness. Our three-pronged *raison d'être* is to (1) partner with the industry and government to upskill and re-skill the workforce in information communication technology, (2) collaborate closely with NUS faculty members in launching continuing education and training programmes for adult learners and (3) support and empower organisations to embark on digital transformation projects.

We are pleased to have been educating and training Singapore and the world's business leaders and computing professionals for the past four decades and are proud to count many locally and internationally prominent leaders in the field among our large and accomplished family of alumni.



Alumni Status and Benefits

Base alumni benefits provided after successful completion of the programme:

1. Invitations to select school events/ alumni events
2. Access to NUS Executive Education webinars
3. Up to 15 percent savings on executive education non-funded programmes
4. Tech Talent Assembly (TTAB) membership to a tech community of practice (CXO Chapter), giving participants an opportunity to attend monthly tech talks, coaching sessions, visits to industry, etc.

Associate Alumni status and benefits:

Upon successful completion of the programme, participants can apply for NUS Associate Alumni status. The application will be reviewed by the SoC. Those eligible will be awarded Associate Alumni status with an NUS lifelong email id and library access.

All benefits are subject to change at the discretion of NUS SoC.

Certificate

Upon successful completion of the programme, participants will be awarded a verified digital certificate by NUS SoC.



Note: All certificate images are for illustrative purposes only and may be subject to change at the discretion of NUS School of Computing.

Admission Requirements

Document | Latest Resume/CV

Work Experience | 10+ years of work experience with minimum of 5 years of management experience.

Language Requirements

All candidates who have received their bachelor's or other degree or diploma from an educational institution where English is the primary language of instruction will not be required to provide proof of English language proficiency.

However, all candidates who have received their bachelor's or other degree or diploma from an educational institution where English is NOT the primary language of instruction are required to demonstrate English language proficiency through ANY ONE of the following methods:

- Obtain an IELTS minimum score of 6.0 or an acceptable equivalent
- Obtain a Pearson Versant Test minimum score of 59
- Obtain a Certificate of Completion for a Certificate course offered by the EMERITUS Institute of Management

In the absence of any one of the above, Emeritus will provide Versant written test.

Application Fee

Round	Application Fee	Deadline
Round 1	US\$100	22 January, 2024
Round 2	US\$150	06 February, 2024
Round 3	US\$200	19 February, 2024
Round 4	US\$250	05 March, 2024
Round 5	US\$300	19 March, 2024
Round 6	US\$375	28 March, 2024

Note: Admission reviews will be conducted by Emeritus.



Programme Fee
US\$10,000 + GST

*Singapore residents who wish to enrol for this programme will be charged GST.




Programme Duration
32 Weeks,
4-6 hours per week



Programme Starts
29 March, 2024

About Emeritus



NUS SoC is collaborating with online education provider Emeritus to offer a portfolio of high-impact online programmes. Working with Emeritus gives NUS SoC the advantage of broadening its access beyond its on-campus offerings in a collaborative and engaging format that stays true to the quality of NUS SoC.

Emeritus' approach to learning is built on a cohort-based design to maximise peer-to-peer sharing and includes video lectures with world-class faculty and hands-on project-based learning.

More than 250,000 students from over 160 countries have benefitted professionally from Emeritus' programmes.

