





A Member of the SIM Group

#### **BACHELOR OF SCIENCE (HONOURS)**

- Computer Science
- Computer Science (Machine Learning and Artificial Intelligence)
- Computer Science (Web and Mobile Development)

UNIVERSITY OF

# LONDON

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## Welcome Messages



Professor Wei Kwok Kee Provost Singapore Institute of Management

# SIM Global Education

is committed to deliver an education that

#### empowers you to

achieve your highest aspirations. Join us in our

multicultural learning environment and experience a

quality education that

will equip you with knowledge and skills for the future of work.





We've transformed the higher education landscape over the last 35 years, with more than

**41,000** graduates.

Equipped with a UOL
qualification and valuable
career guidance from SIM GE,
our graduates are
highly sought after both

locally and globally.



Professor Wendy Thomson CBE Vice-Chancellor University of London



# Why Study at SIM GE?

Annual enrolment of about 16,000 students

#### SIM GE

is the global education arm of the Singapore Institute of Management (SIM Group) founded in 1964.

Our approach towards lifelong learning is to equip you to be future-ready and to empower you to fulfil your highest aspirations.

40 countries

Over 172,000 graduates

## Through-Train Pathway

Over 80 full-time and part-time academic programmes through over 10 university partners.

#### Bond-Free Scholarship & Bursary

Scholarships are available to students who exce in academics,

#### Globallyrecognised

Degrees offered at SIM have the same curricula & academic standards as those awarded onshore.

#### Boost Employability

Overall Employment Rate (SIM)

82.4%

#### Global Perspectives & Insights

Exposure to diverse cultures and a global network.





### Student Life

## Seize the now

Make the most of your time in SIM GE



#### A CAREER HEAD START

Raise your employability through career-readiness initiatives like the Talent Development Programme, Career Chapters and Mentorship Programme.



#### STUDENT CLUBS & COMMUNITIES

Sharpen your leadership and social skills or pursue your passion with more than 70 student councils and clubs available.



#### **OVERSEAS EXPERIENCE**

Gain international exposure through overseas academic exchange programmes, study trips and workshops.



#### STUDENT CARE

Boost your overall wellbeing through healthy living and wellness programmes or seek the guidance you need from our SIM peer mentors.

### Student Learning Centre

A one-stop centre for student academic support





#### PEER-ASSISTED LEARNING (PAL)

Benefit from a studentto-student support network providing academic assistance for selected modules.



#### **WORKSHOP SERIES**

Attend complimentary workshops on academic writing, study skills and personal effectiveness to hone effective learning skills.



#### **PROFESSIONAL SKILLS**

Develop professional skills that are highly valued by employers through wellstructured training programmes.



#### CONSULTATION SERVICES

Work with our advisors to improve your skills in written and oral presentation.

# University of London



including the London School of Economics and Political Science, UCL and Goldsmiths Alumni includes
six Nobel Prize
winners, leaders
of Commonwealth
countries, business
leaders, etc.

Accessible to students from all over the world since

1858

The University of London is one of the world's leading universities.

respected by employers and internationally recognised for its high academic standards.

48,000 students in more than 190 countries





#### Goldsmiths, University of London

Founded in 1891, Goldsmiths is **internationally renowned** for teaching and research in creative, cultural and computational disciplines.

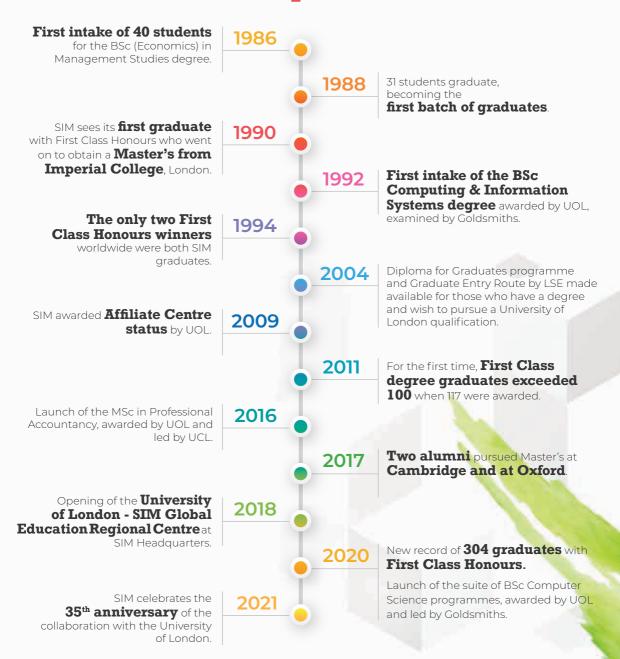
# Five Stars institution

with a **Five Star**rating for areas
including **teaching**, **employability**, and **internationalisation**,
according to the QS
Stars/QS Intelligence
Unit 2020

### **Top 50**

in the UK for
Computer Science
and Information
Systems, according
to the QS World
University
Rankings by
Subject 2019

# SIM and University of London



BSc = Bachelor of Science MSc = Master of Science

## Why choose SIM-UOL?

#### **Qualifications that Employers Value**

93.6%\* Overall Employment Rate for SIM-UOL Goldsmiths-led Bachelor's Degree Programmes.

#### Rigorous Curriculum with Through-train Pathway

High standards with academic direction set by well-known Colleges – LSE, UCL and Goldsmiths. Throughtrain pathways are also available from Foundation to Bachelor's and postgraduate programmes.

#### **Academic Awards and Prizes**

Annual ceremony held to recognise students for the Academic Achievements awarded by UOL.

#### Study at Goldsmiths

Transfer to Goldsmiths' campus in the UK for the remainder of your undergraduate degree.

#### **UOL Master's Scholarship**

Under the auspices of the University of London - SIM Global Education Regional Centre, a master's scholarship is awarded annually for a one-year full-time master's at any of the 17 UOL member institutions.

#### **Proven Track Record**

Over the last ten years, 160 SIM-UOL alumni have progressed to postgraduate studies in the UK. There are over 2,300 SIM-UOL First Class Honours graduates to-date, with many alumni holding senior positions.

# BACHELOR OF SCIENCE (HONOURS) IN Computer Science

#### **Objectives**

The BSc (Honours) in Computer Science will allow you to develop wide and practical skillsets in computing with strong programming and mathematics skills, as well as softer skills in project management, presentation and teamwork. This programme equips you with an in-depth understanding of the key conceptual and technological issues involved in building software systems.

#### **Career Prospects**

Graduates will be qualified for a range of computer science jobs in the creative industries, business, finance, education, health, science, government, and public sectors.

Typical job titles include data analysts and scientists, machine learning specialists, application programmers, web and mobile developers, video game developers, and systems analysts.

#### Modules

STAGE 1	CM1010 In CM1015 C0 CM1020 D CM1025 Ft CM1030 H CM1035 Al	troduction to programming I troduction to programming II omputational mathematics iscrete mathematics undamentals of computer science ow computers work gorithms and data structures I feb development
STAGE 2	CM2010 Sc CM2015 Pi CM2020 Ai CM2025 Cc CM2030 G CM2035 Al	bject oriented programming oftware design and development rogramming with data gile software projects omputer security raphics programming gorithms and data structures II atabases, networks and the web
STAGE 3*	CM3005 D CM3010 D CM3015 M CM3020 A: CM3025 C CM3030 G CM3035 A: CM3040 P! CM3045 3I CM3050 M CM3055 In CM3060 N CM3065 In	nodules from the following: ata science ata science ata bases and advanced data techniques achine learning and neural networks rtificial intelligence rtual reality ames development dvanced web development nysical computing and internet of things D graphics and animation obile development teraction design atural language processing telligent signal processing

<sup>\*</sup> SIM reserves the right to change the units offered based on relevance, practicality and demand, in consultation with Goldsmiths, University of London. The subjects for Stages 1 and 2 are the same for the BSc Computer Science programmes (with or without specialisation). Students take specialised modules only at Stage 3.



This degree teaches you how to make your own tools for working with media. You gain a much deeper, applied technical understanding of digital media as well as having opportunities to work creatively with media.



Dr Matthew Yee-King

Programme Director, Goldsmiths, University of London

# BACHELOR OF SCIENCE (HONOURS) IN Computer Science (Machine Learning and Artificial Intelligence)

#### **Objectives**

The BSc (Honours) in Computer Science (Machine Learning and Artificial Intelligence) is designed to equip you with the mathematical and engineering knowledge to construct both machine learning and AI systems and learn how machines make sense through intelligence signal processing. These techniques are widely used in the technology industry for a variety of applications. For example, recommending music and products to people, identifying faces in photos and predicting trends in financial markets.

#### **Career Prospects**

Graduates will be able to apply for a range of technical, problem-solving jobs in a rapidly growing area. Companies and institutions are applying machine learning and AI to a wide range of problems in business, finance, education, health, science, government, and public sectors as well as new application areas such as music and other creative work.

#### Modules

STAGE 1	CM1005 Introduction to programming I CM1010 Introduction to programming II CM1015 Computational mathematics CM1020 Discrete mathematics CM1025 Fundamentals of computer science CM1030 How computers work CM1035 Algorithms and data structures I CM1040 Web development
STAGE 2	CM2005 Object oriented programming CM2010 Software design and development CM2015 Programming with data CM2020 Agile software projects CM2025 Computer security CM2030 Graphics programming CM2035 Algorithms and data structures II CM2040 Databases, networks and the web
STAGE 3*	Five compulsory modules:  CM3010 Databases and advanced data techniques  CM3015 Machine learning and neural networks  CM3020 Artificial intelligence  CM3060 Natural language processing  CM3065 Intelligent signal processing  Choose one module from the following:  CM3005 Data science  CM3005 Virtual reality  CM3030 Games development  CM3035 Advanced web development  CM3040 Physical computing and internet of things  CM3045 3D graphics and animation  CM3050 Mobile development  CM3050 Interaction design  PLUS a compulsory project:  CM3070 Final project

<sup>\*</sup> SIM reserves the right to change the units offered based on relevance, practicality and demand, in consultation with Goldsmiths, University of London. The subjects for Stages 1 and 2 are the same for the BSc Computer Science programmes (with or without specialisation). Students take specialised modules only at Stage 3.

# BACHELOR OF SCIENCE (HONOURS) IN Computer Science (Web and Mobile Development)

#### **Objectives**

Web and mobile development are critical application areas for computer science. Many of the largest technology companies maintain large scale web and mobile applications, providing services such as social media, search, advertising and video and audio streaming. The BSc (Honours) in Computer Science (Web and Mobile Development) aims to set you up with the skills you need to develop applications for web and mobile devices. You will also learn about mobile development, web development and databases.

#### **Career Prospects**

Graduates will be qualified for jobs involving the development of web and mobile technology such as websites and applications for smartphones and tablets.

Typical job titles include **mobile** application developer, mobile software engineer, front-end engineer, full stack developer and back-end developer.

#### Modules

STAGE 1	CM1005 Introduction to programming I CM1010 Introduction to programming II CM1015 Computational mathematics CM1020 Discrete mathematics CM1025 Fundamentals of computer science CM1030 How computers work CM1035 Algorithms and data structures I CM1040 Web development
STAGE 2	CM2005 Object oriented programming CM2010 Software design and development CM2015 Programming with data CM2020 Agile software projects CM2025 Computer security CM2030 Graphics programming CM2035 Algorithms and data structures II CM2040 Databases, networks and the web
STAGE 3*	Five compulsory modules:  CM3010 Databases and advanced data techniques  CM3035 Advanced web development  CM3045 3D graphics and animation  CM3050 Mobile development  CM3055 Interaction design  Choose one module from the following:  CM3005 Data science  CM3015 Machine learning and neural networks  CM3020 Artificial intelligence  CM3025 Virtual reality  CM3030 Games development  CM3040 Physical computing and internet of things  CM3060 Natural language processing  CM3065 Intelligent signal processing  PLUS a compulsory project:  CM3070 Final project
	GNBO70 Timal project

<sup>\*</sup> SIM reserves the right to change the units offered based on relevance, practicality and demand, in consultation with Goldsmiths, University of London. The subjects for Stages 1 and 2 are the same for the BSc Computer Science programmes (with or without specialisation). Students take specialised modules only at Stage 3.

# COMPUTER SCIENCE Programme Information

The suite of Computer Science undergraduate programmes use creative interactive approaches delivered through Coursera, the world's largest online learning platform. This therefore provides students with immersive learning experiences. Students are expected to attend classes at SIM having reviewed the online resources.

#### **Duration and Intakes**

Programme	Duration	Intakes
BSc (Honours) in Computer Science Computer Science (Machine Learning and Artificial Intelligence) Computer Science (Web and Mobile Development)	3 Years Full-time	April & October

#### **Admission Criteria**

For General Entrance Requirements, an applicant must normally have the following qualifications:

- Be 17 years old by 30 November in the year of registration with University of London
- Have passes in two subjects at GCE 'A' Level (or H2 level), and at least three subjects at GCE 'O' I evel
- Have at least equivalent to B4 grade at GCE 'O' Level Mathematics (Computing and Statistics do not count as Mathematical subjects) or pass either Discrete Maths or Numerical Maths in the SIM bridging course
- Provide proof of competence in English acceptable to the University, such as a pass (Grade C6 and above) in the GCE 'O' Level English Language examination

Other qualifications to satisfy the General Entrance Requirements:

- SIM Diploma in Information Technology (allows for exemption from Year 1 with bridging)
- SIM diplomas in business-related disciplines
- · Polytechnic or IB diploma

- University of London International Foundation Programme (IFP)
- Teaching certificate from NIE/ NTU
- · NUS High School Diploma

Please refer to SIM GE website for the full admission criteria, and the General Entrance Requirements for international students. Alternatively, please refer to the University of London website for full information:

www.london.ac.uk/applications/ how-apply/am-i-qualified

#### **Mode of Delivery**

- · Computer simulation
- Consultations
- · Lab work
- Lectures
- · Online learning through Coursera

#### Learning through Coursera

The suite of computer science programmes are fully developed and taught by the same faculty that teaches on-campus at University of London. The University of London leverages Coursera's online education platform to deliver the programme curriculum, allowing BSc CS students to benefit from Coursera features such as interactive video

transcription, in-course note taking, and seamless learning across multiple devices.

At SIM, lecturers guide students to leverage the resources available on Coursera and facilitate the learning that takes place. The supplementary readings, video lectures, assignments, and discussion forums are extensively discussed in class. Students also collaborate on group projects using Zoom and Slack.

Students may access all course materials anywhere with the mobile app on Coursera, available on iOS and Android. Using the mobile app, learners can:

- Save a week's worth of content for offline access with one click
- Save and submit quizzes offline
- View text transcripts of lecture videos
- Take notes directly in the app
- Set reminder alerts to help you make progress

#### **Assessment**

- · Coursework / Projects
- Written Exams

#### **Programme Fees**

	Local Students	International Students
Programme Fees	S\$20,030.40	S\$21,442.80
UOL Application Fees (one-time payment)	£107	
UOL Fees	£9,3	360
UOL Examination Fees	S\$1,870	
Estimated Overall Fees	S\$40,900	S\$42,100

Fees in S\$ are inclusive of prevailing GST. Fees do not include textbooks. These estimated fees are based on the following components:

- SIM Programme Fees Payable at the start of each semester and is calculated on a per module basis
- UOL Fees Payable in £ per semester and is calculated on a per module basis; and subject to taxation and yearly increase.
- UOL Examination Fees Payable in S\$ per semester to the RELC Examinations Bureau and is calculated on a per module basis, for the courses which have exams. For physical examinations, the RELC will also collect an admin fee (per paper). This admin fee is waived in the event the exams are held online.

Please refer to SIM GE website for the latest fees. For updates from RELC, refer to https://www.relc.org.sg/universityexams/uol

#### Other Fees

Student Development Fee S\$251.45

A one-time payment applicable to students embarking on a full-time Diploma or Undergraduate programme at SIM. This fee goes towards activities that will help in students' personal growth and equip them with functional skills to enhance their employability.

#### International Student Induction Fee

S\$428.00

A one-time fee payable by new international students. This fee covers pre-arrival and arrival support, including activities to enhance the international student learning experience.

All fees are inclusive of the prevailing GST and are applicable for intakes commencing from Jan 2022.

Please visit SIM GE website for more information.

#### Recognition of Prior Learning (RPL)

RPL may be awarded for up to 8 units (two semesters or 12 months).

In order for RPL to be considered, a student must normally have successfully completed the whole of the qualification on the basis of which he or she is claiming RPL and have already received the final award for that qualification within the last five years. An application from a student who has not yet received his or her award will be considered under the rules governing RPL at the time that the award is finally made and not at the time that the application for RPL was submitted.

You cannot be considered for RPL from a particular unit if you have already entered the examination for that unit.

The granting of RPL is at the discretion of the University. The University reserves the right to review its RPL policy each year.

#### Discretionary Recognition of Prior Learning (RPL)

A fee is charged by the University of London for processing discretionary RPL. (Fees are subject to annual increase).

If discretionary RPL is granted, please inform SIM immediately so that a pro-rated refund of unattended classes for that unit may be given to you.

#### Automatic Recognition of Prior Learning (RPL)

RPL can be awarded automatically based on certain polytechnic or SIM qualifications. The RPL application fee is not required for RPL awarded in this category. RPL is subject to review and changes each year. Please refer to SIM GE website for a list of diplomas that can be awarded automatic RPL.

#### Bridging Course for Economics, Mathematics and Accounting (EMA)

The Bridging Course for Economics, Mathematics and Accounting (EMA), is developed and awarded by Singapore Institute of Management, Singapore. The mathematics modules relevant for the Goldsmiths computer science programme is organised twice a year in January and July. The objective is to help applicants attain RPL and/or meet the mathematics requirement for admission.

Upon passing the required bridging modules, students will receive a Certificate of Completion from SIM.

Applicants are required to complete the bridging course section when making an application to SIM.

#### Modules

- Discrete Mathematics
- Numerical Mathematics

Depending on the applicant's prior academic background and the UOL RPL which may be awarded, the candidate is allowed to sign up for up to two modules.

Note: Economics and Accounting modules are not applicable to applicants applying for the BSc Computer Science programmes.

#### Assessment

• 100% exam-based

#### Progression

Min. score of 40% (Pass) for each module to qualify for RPL/meet the maths requirement.

Intakes	January or July (Full-time, Course duration is two months for each of the intake.)
Fees (per module)	S\$695.50

Fees are inclusive of prevailing GST. Fees do not include textbooks and application charges. Please refer to SIM GE website for the latest fees.

# The SIM-University of London Experience

**Inter-Collegiate Sports** 

The annual event organised by the SIM-University of London Student Council provides students a friendly platform to battle it out through eSports, Dodgeball, Captain's Ball and many more.







#### SIM IT Club

The club aims to equip students with new tech skills through industry-relevant talks and workshops. Tok Yee Ching, graduate of the SIM-UOL BSc (Hons) in Computing and Information Systems\* and former IT Security Director of the SIM IT Club shared with us in 2019 that he benefitted greatly from the club having gained invaluable knowledge and soft skills to venture out as a global citizen.

Yee Ching is currently pursuing his doctorate at the Singapore University of Technology and Design and under an IMDA scholarship. He was also among the 12 recipients who were recognised for their contributions in raising Singapore's standing in cybersecurity at the 2019 'The Cybersecurity Awards'.

# Application & Admission



#### Join the SIM Community!

Singapore Institute of Management Pte Ltd 461 Clementi Road, Singapore 599491

+65 6248 9746

www.simge.edu.sg

Follow Us!









#### APPLICATION FEES

An application fee is payable for each application form that is submitted. This fee (inclusive of the prevailing GST) is non-refundable and non-transferable. The fee will be fully refunded only if the intake does not commence. Unpaid applications will not be processed.

Payment Mode: MasterCard/Visa credit cards or eNETS

Application	Local applicants	International applicants
Fees	S\$96.30	S\$481.50*

\*This does not include all fees related to Student's Pass application.

#### PRIVATE EDUCATION ACT

The Private Education Act was legislated in December 2009 to regulate the private education institutions (PEIs) in Singapore. The regulatory regime, as set-out under the Private Education Act and its subsidiary legislation, comprises the Enhanced Registration Framework and the EduTrust Certification Scheme, both administered by the Committee for Private Education (CPE), a part of SkillsFuture Singapore (SSG).

Singapore Institute of Management Pte Ltd (SIM PL), in meeting the regulatory requirements under the Private Education Act, has put in place the following:

- · Adoption of the Standard PEI-Student Contract template from CPE
- · Allowing students a cooling-off period of 7 working days after signing the PEI-Student Contract
- · Protection of students' fees under the Fee Protection Scheme
- · Transparent refund, course transfer, leave of absence and withdrawal policies
- · Commitment in maintaining the confidentiality of students' data

For more information on the above mentioned, visit www.simge.edu.sg/ application-and-admission/edutrust/ and www.simge.edu.sg/application-andadmission/general-admin-matters/.



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This brochure contains key information, accurate as at time of print on 20 May 2022. For the most updated and complete corporate and programme information, refer to our website