NUS
National University
of Singapore

School of Computing

Welcome

http://www.comp.nus.edu.sg

Our Campus

The overall look

Our Campus

Students working in the canteen

Our Campus

Students working in a laboratory

Our Campus

Students attending a lecture

Our Mission

To be an international centre of excellence for multi-disciplinary learning and research in IT

Our Philosophy

- To produce competent IT professionals
- To encourage active self-learning
- To cultivate creativity and innovation

Why Computing?

- Wide range of employment options
  - 1999 Infocomm Manpower and Skills Survey – http://www.ida.gov.sg/
    - Infocomm manpower in Singapore:
      - 1999 – 92,800
      - 2000 – 105,000
      - 2001 – 114,000
      - 2010 – 250,000
- Worldwide employment opportunities
- Good remuneration packages

	2001	2000
Accountancy	$25,827	$26,858
Architecture	$31,000	NA
Arts	$26,185	$26,053
Arts (Hons)	$31,273	$30,621
Building	$28,375	$30,215
Business	$28,375	$29,460
Business Administration	$26,310	$26,053
Business Administration (Hons)	$34,047	$30,621
Chemical Engineering	$33,440	$33,547
Civil Engineering	$31,859	$34,660
Communication Studies (Hons)	$30,216	$29,667
Computer & Information Sciences/Computing	$33,289	$32,848
Computer & Information Sciences/Computing(Hons	$37,500	$36,343
Computer Engineering - NUS	$34,545	NA
Computer Engineering	$33,493	$33,896
Computer Engineering (Hons)	$35,667	$37,316
Dentistry	$37,800	$37,363
Electrical Engineering	$28,500	$35,594
Materials Engineering	$32,667	$33,655
Materials Engineering (Hons)	$29,875	$34,000
Mechanical Engineering	$34,338	$34,339
Real Estate	$29,194	$30,428
Science	$27,107	$27,512
Science (Hons)	$31,984	$32,159
Social Science (Hons)	$31,099	$33,848

Sources: Year 2000 NUS and NTU graduate employment survey and

Year 2001 NUS and NTU graduate employment survey

March 8, 2002 Business Times

New computer science grads still in favour

Full employment for 2001's NUS honours graduates in discipline: survey

By Chuang Peck Ming

THE high-tech sector may have run out of steam, but the cream of local computer and information science fresh graduates is still in demand.

Last year, all those with an honours degree landed a job, according to the latest NUS survey of graduate employment.

And among graduates with ordinary degrees in computer and information science, 87.4 per cent found jobs. A relatively high figure given the circumstances, but still below the 98.4 per cent achieved by graduates in the year before when the economy was booming.

Nanyang Technological University's fresh graduates in computer engineering also enjoyed a relatively respectable 83.1 per cent employment rate, albeit lower than the 98.4 per cent the year before.

NUS law graduates were also highly sought after last year. All of them landed jobs, quite a feat given that the overall employment figure for NUS fresh grads fell to 79.4 per cent from 91.6 per cent.

Architectural graduates enjoyed the same demand. But their full employment had to be seen in context of their small number, and it also includes those undergoing year-out practical training. Medical and dental graduates were counted as fully employed because they were serving housemanship or working for the government.

Those who finished with a Bachelor of Engineering (Environmental) degree in 2000 were fully employed when the 2000 NUS survey was done, but last year's batch saw their employment rate fall to 66.7 per cent - the lowest among the 2001 NUS graduates.

The public sector - government departments and statutory boards - absorbed a bigger share of the NUS graduates last year, accounting for almost half of all those who found jobs, up from 39.3 per cent in 2000.

The biggest chunk of the NUS graduates employed - 19.7 per cent - went into teaching, up from 14.2 per cent in the previous year. One in 10, up from 7.9 per cent, signed up in the army, police and other defence and security outfits.

Among other sectors that took in more graduates last year were the engineering, architectural and technical services, healthcare, and community development and social services.

The finance, insurance and economic services sector - one of the two biggest employers of fresh graduates in the year before - hired 11 per cent of the 2001 NUS graduates, down from 14.3 per cent. The communications and information services sector - the other biggest employer in 2000 - recruited 8.4 per cent.

As for NTU graduates, the biggest chunk (24 per cent) of those who found employment last year ended up in accounting, auditing and book-keeping services jobs - up from 18 per cent.

Manufacturing jobs, which accounted for the largest share (21 per cent) of employment in the previous year, went to 17.1 per cent of the employed NTU graduates.

The number hired by the education sector rose from 4.5 to 6.6 per cent among the employed. The defence and security sector also took up 6.6 per cent, up slightly from 6.3 per cent.

Charting career paths

NUS graduates' employment rates

Sector	2001	2000
	%	
Number of respondents	100.0	100.0
Education	19.7	14.2
Finance, insurance, economic svcs	11.0	14.3
Manufacturing	6.5	11.5
Defence, security (SAF or police, etc)	9.7	7.9
Communications, information svcs	8.4	14.3
Engineering, architectural, technical svcs	8.2	3.5
Construction, real estate, infrastructure, housing, environment	7.3	6.8
Transport, storage (land, water or air)	6.4	5.6
Health	6.4	3.1
Community development, social svcs	5.5	3.9
Trade, commerce (wholesale, retail, etc)	3.2	4.8
Legal svcs	2.4	1.2
Recreational, leisure, hospitality, cultural svcs	1.4	1.9
Business svcs (advertising, exhibitions, employment agencies, etc)	0.8	0.8
Business, professional, labour associations	0.8	-
Information technology	0.9	-
Accounting, auditing, book-keeping svcs	0.5	-
R&D in natural sciences, engineering	0.2	1.2
Life sciences	0.2	-
Research, management consultancy	<0.1	2.0
Embassies/high commissions in Singapore/ foreign govt agencies in Singapore	-	<0.1
Others	0.6	0.4

* Subtotals may not add up to total because of non-response

Degree	2001	2000
	%	
B.A(Arch)	100.0*	66.7
B. Comp (Hons)	100.0	97.0
B.D.S.	100.0**	100.0
B. Sc (Pharm)	100.0***	-
LLB/LL.B(Hons)	100.0	-
B.Sc (Pharm Hons)	90.9	-
B.B.A(Hons)	87.7	92.4
B.Sc (Bldg)	87.5	98.1
B. Comp	87.4	98.4
B.Eng(Comp)	84.6	-
B.Sc(Hons)	84.2	97.1
B.Eng(Civil)	83.1	95.2
B.Sc(Real Estate)	81.6	96.9
B.A(Hons)	81.5	92.2
B.Eng(Elect)	80.6	99.1
B.Soc Sci (Hons)	79.6	94.3
B. Eng(Mech)	79.3	94.0
B.B.A	78.8	87.8
B.Eng(Chem)	75.7	91.2
B.Sc	75.6	89.7
B.A	73.6	85.8
B.Appl. Sci	70.0	-
B.Eng (Environmental)	66.7	100.0
Overall	79.4	91.6

* One B.A (Arch) was employed, the rest are undergoing year-our practical training.
** All B.D.S. graduates are employed by the govt as dental officers.
*** One respondent out of 2 B.Sc (Pharm) graduates

Source: 2001 NUS Graduate Employment Survey

Degree Programmes

- B.Comp. (Hons.) in Computer Engineering
- B.Comp. (Hons.) in Computer Science
- B.Comp. (Hons.) in Information Systems
- B.Comp. (Hons.) in Electronic Commerce
- B.Comp. (Hons.) in Communications and Media
- B.Comp. with Technology or Business Focus

Computer Engineering

- Duration: 4 year degree programme
- Focus: Integrated view of software and hardware interface and design
- Topics: Embedded systems, mobile devices, wearable computing, and communications appliances
- Careers: R&D engineers, computer engineers, and communications engineers

Computer Science

- Duration: 4 year degree programme
- Focus: Strong technical knowledge of computer science and technology
- Topics: Programming languages, theory and algorithms, computer systems, and human-computer interaction
- Careers: R&D specialists, technical support specialists, and systems software specialists

Information Systems

- Duration: 4 year degree programme
- Focus: Multi-disciplinary knowledge combining computing and management
- Topics: IT trends and impact, IT strategy, IT security, and knowledge management
- Careers: Technology analysts, management consultants, and systems integrators

Electronic Commerce

- Duration: 4 year degree programme
- Focus: Integrated view of business development and IT trends
- Topics: IT trends, entrepreneurship, consumer behavior, and economic analysis of businesses
- Careers: IT entrepreneurs, electronic business analysts, and electronic business consultants

Communications and Media

- Duration: 4 year degree programme
- Focus: Technological underpinnings and social aspects of communications and media
- Topics: Multimedia information processing, human-computer interaction, game development, entertainment with IT, and mass communication with IT
- Careers: IT regulators, information services specialists, and advertising media specialists

Technology or Business Focus

- Duration: 3 year degree programme
- Focus: Theoretical computing training and practical computing experience
- Topics: Systems analysis and design, systems integration, end-user computing, and electronic commerce
- Careers: Systems analysts, systems programmers, and end-user support analysts

Special Programmes

- University scholars programme (for top students)
- Undergraduate research opportunity programme (for senior students)
- Students exchange programme (with overseas universities)

Graduate Programmes

- Master of Computing (by coursework)
- Master of Science (by coursework and research)
- Doctor of Philosophy

Industry Connection

- School advisory board (comprises senior IT practitioners)
- Corporate affiliates programme (involves leading IT organizations)
- School incubation centre (facilitates technopreneur activities)

Teaching Staff

- About 70 PhDs, educated in 20 countries in North America, Europe, and Asia-Pacific
- Active researchers sitting on journal editorial boards and conference programme committees
- Active practitioners with patents, start-up companies, and consulting experience

Computing Facilities

- 1000 personal computers and 200 workstations connected to a high speed campus network
- Plug and play network that provides secure access to campus computing facilities through notebook computers
- Wireless network

Admission Requirements

- Good A level pass in Mathematics (Syllabus A or C)
- Good A level pass in Computing, Further Mathematics, or Physics (preferred)
- Good polytechnic results in computing diploma
- Good polytechnic results in computing-related or business-related diploma (placement test required)

Advanced Credits (1)

A level subjects:

- Computing – B and above
- Physics - A
- Further Mathematics – A
- Accounting – A
- Economics – A

Admission Requirements – Poly(1)

Computing diploma	Business Informatics (NYP) Computer Information Systems (SP) Computer Studies (NP) Information Technology (TP & NYP) Information Technology (Computer Studies) (NP) Infocomm Technology (NP) Multimedia Computing (NP) Programming & Systems (SP)
Computing-related diploma	Computer Engineering (TP) Electrical Engineering (SP & NP) Electronics, Computer & Communication Engineering (NYP and SP) Electronics, Computer & Control Engineering (NYP) Electronic & Computer Engineering (NP) Electronic Engineering (NP) Electronics & Communication Engineering (SP) Electrical & Electronic Engineering (NP) Electronics & Telecommunication Engineering (NP) Engineering Informatics Diploma (NYP) Info-Communications (TP) Internet Computing (TP) Multimedia and Information Communication Technology (NYP) Multimedia Software Engineering/Multimedia Technology (SP) Multimedia System Engineering (NYP)

Admission Requirements – Poly (2)

Business-related diploma	Business (TP) Business Administration (SP) Business Studies (NP) Business Management (NYP)

Advanced Credits (2)

Type of Diploma	Computing diploma	Computing-related diploma	Business-related diploma
Exemptions granted	Modular credits worth to one year exemption (automatic exemption) Including : CS1101, CS1102, CS1104, CS1105, CS2102, CS2103	Exemptions granted subject to passing the computing-related placement test Including CS1101, CS1105, CS2102, CS2103	Exemptions granted subject to passing the business-related placement test Including CS1105, BZ1002, EC1310, BZ2004

Placement Test

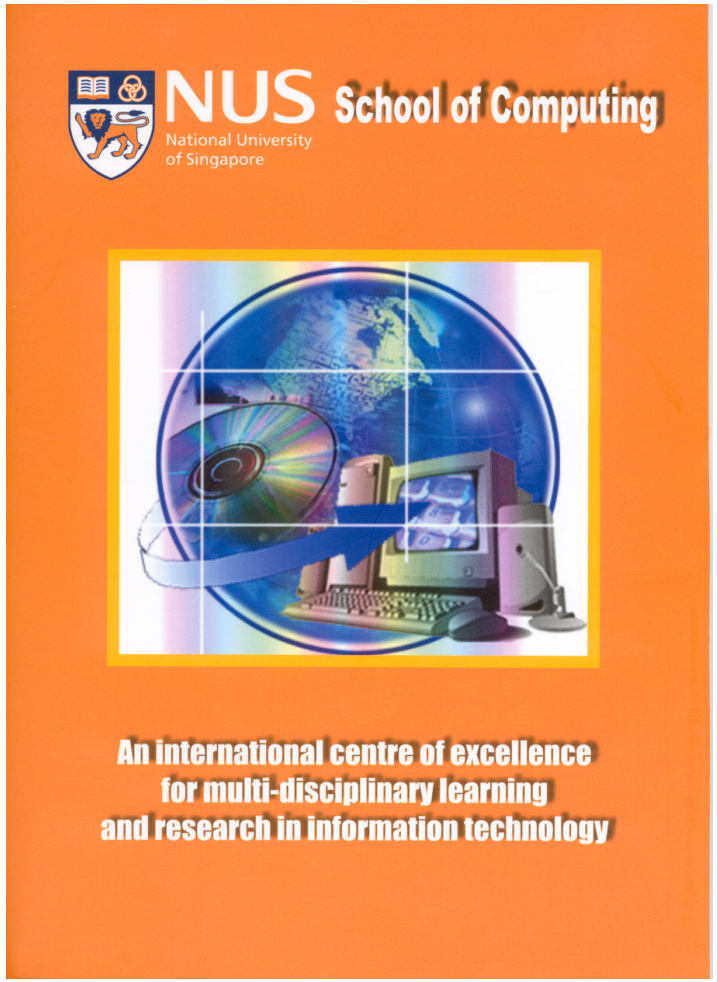
- Placement test is done after your application has been accepted.
- Only students who have computing/business related diplomas need to take the test.
- At least 60% pass to receive modular exemptions

1) Students with computing diplomas do not need to sit for the test.
2) Partial exemptions from the requirement of unrestricted electives outside SoC (ULR) are considered.
3) Students need to fulfil 135 MCs for a 4-yr BComp programmes and 105 MCs for the 3-yr BComp programme for 2002 poly intake.

Student Intake

	Computing	Computer Engineering
1997	433	66
1998	621	86
1999	690	129
2000	730	74
2001	639	84

More than 2300 undergraduate and 500 graduate students



Website for School Brochures

http://www.comp.nus.edu.sg/aboutsoc/SchBrochures.html

NUS
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Survey

of computing degrees

http://www.comp.nus.edu.sg

Want to ask about how is life in SOC?

Want to know more from the students in SOC?

Wondering if you should come to SOC?

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Visit us at the booth now

Venue: LT 27 Foyer

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Thank You

http://www.comp.nus.edu.sg

CE in SoC vs CE in Engg

- CE in SoC
  - Emphasize on software
  - Focus on embedded systems
  - Train computer scientists
  - http://www.comp.nus.edu.sg/~cmcurric/soc23BCompCE.pdf
- CE in Engg
  - Emphasize on hardware
  - General Computer Engineering focus
  - Train engineers

CM in SoC vs MassComm

- CM in SoC
  - Emphasize on digital media technology over the internet
  - Train computer scientists
  - http://www.comp.nus.edu.sg/~bcompcm
- MassComm in NTU
  - Emphasize on mass communication
  - Train journalists

Courses Offered by SoC

- http://www.comp.nus.edu.sg/~cmcurric/soc23chap7.pdf