School of Computer Science and Engineering

Bachelor of Engineering (Computer Science)

Part Time Programme

Student Handbook 2019

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Programme Coordinator's Message

Welcome to the School of Computer and Engineering (SCSE), Nanyang Technological University!

Established in 1988, the SCSE has successfully provided several full-time undergraduate programmes in both computer science and computer engineering by our world-class faculty. Since 2015, our school has launched a part-time Bachelor of Engineering (Computer Science) programme to working adults who would like to pursue further tertiary education and upgrade their skill sets. This undergraduate programme is currently the only part-time computer science programme coincided with its full-time programme in Singapore. The part-time students pursue the same core technical courses and many of the general education core courses in the full-time programme but the classes are conducted in the evening. All students regardless of full time or part time will sit for the same examinations. Since part-time students has relevant on-going working experience, we have exempted the students for a 20-week Professional Internship.

The part-time programme is a four-year degree programme. Due to the workload and family commitments, students may choose to take up to six years to compete the degree. We would like to remind students to invest your time prudently and productively on the courses because the programme is rigorous, challenging and interesting. Moreover, all part-time courses are only offered in one semester every academic year. Higher-level courses may have some prerequisites of 1000 and 2000 level courses. Missing a course may delay graduation or force students to take leave of absence. Thus, students are strongly encouraged to seek academic consultations throughout their study when you face any academic difficulty.

Our part-time programme can empower you to achieve the dreams of your life. Most graduates are gainfully employed with higher starting salary by local or multinational corporations all over the world. Some of them have even ventured to start-up their own companies, e.g. Food Panda, Jumei International Holding etc. At the same time, all of our graduates will become part of our social network. Upon graduation, a wide range of job opportunities awaits you.

The programme will definitely enable you to forge reliable networks and fond memories that can last for decades. You can take advantage of all these opportunities to build a bright future. We hope that you will do your best to complete the education at NTU successfully.

Wishing you a great journey in the study!

Dr. Loke Yuan Ren

August 2019

Programme Outline

Students are required to complete a total of 36 modules (for students with the requisite full-time working experience) inclusive of electives over a period of 4 years. Each student is recommended to take about 4-5 modules per semester. Students will be required to undertake MDP in Year 2 and FYP in Year 3.

Year 1	Year 2	Year 3	Year 4
CZ1011 Engineering Maths I	CZ2001 Algorithms	CZ2005 Operating Systems	CZ4079 Final Year Project
CZ1003 Introduction to Computational Thinking	CZ2002 Object Oriented Design & Programming	CZ2007 Introduction to Databases	CZ3001 Advanced Computer Architecture
CZ1005 Digital Logic	CZ2004 Human Computer Interaction	CZ3002 Advanced Software Engineering	CZ4xxx Technical Elective 2
GC0001 Sustainability: Seeing Through The Haze	CZ2003 Computer Graphics & Visualization	HY0001 Ethics & Moral Reasoning	CZ4xxx Technical Elective 3
HW0001 Introduction to Academic Communication*	CZ2006 Software Engineering	CZ4079 Final Year Project	CZ4079 Final Year Project
CZ1006 Computer Organization & Architecture	CZ3003 Software Systems Analysis & Design	CZ3006 Net Centric Computing	CZ3007 Compiler Techniques
CZ1007 Data Structures	CZ1015 Introduction to Data Science & Artificial Intelligence	CZ3005 Artificial Intelligence	CZ4xxx Technical Elective 4
CZ1012 Engineering Maths II	CZ0001 Engineers & Society	CZ4xxx Technical Elective 1	HW0288 Engineering Communication II
HW0188 Engineering Communication I			
Special Term Modules			
MH1812 Discrete Mathematics	CZ3004 Multidisciplinary Design Project	CZ4079 Final Year Project	

*Qualifying English Test (QET)

Students admitted to undergraduate courses of study in NTU are required to take the Qualifying English Test (QET) unless they meet the exemption criteria. Students who fail the QET will be required to take Introduction to Academic Communication (HW0001) as a subject of study. Students (unless exempted from QET) will not be eligible to register for all language electives and selected Communication Skills courses, or to graduate from NTU if they do not pass QET or HW0001.

Click here for Curriculum

Period of Study

The normal period of study is 4 years for students with the requisite full-time working experience. Students may be allowed to complete the programme in not more than 6 years.

Academic Integrity for Students

Adhering to the principles of academic integrity as defined by NTU is essential to your success in your studies and to your professional life beyond university. It is important to learn what academic integrity requires of you, and to practice it. This may mean taking a different approach to your work at NTU from what was expected of you at school.

It is also important for you to understand that the principles set out here are not just a set of rules; they are essential to the transmission of knowledge, and (importantly) to the way we build knowledge. Academic integrity is important for the whole university community, and it is central to the way your lecturers undertake research.

The following section sets out NTU's policy on plagiarism. After that, you will find a more detailed explanation of what you need to do to conform to the principles of academic integrity ("A Guide to Academic Integrity"). It is very important that you understand this section in detail.

Plagiarism

Plagiarism is to use or pass off as one's own, writings or ideas of another, without acknowledging or crediting the source from which the ideas are taken. As defined under the NTU Honour Code, this includes:

- The use of words, images, diagrams, graphs or ideas derived from books, journals, magazines, visual media, and the internet without proper acknowledgement;
- Copying the work of another student, having another person write one's assignments, or allowing another student to borrow one's work;
- Copying of work from the internet or any other sources and presenting as one's own; and
- Submitting the same piece of work for different courses or to different journals and publications.

Plagiarism undermines academic integrity as it is a form of intellectual dishonesty. It affects the University's reputation and devalues the degrees offered.

Plagiarism is regarded as a very serious offence by the University. It is considered as an instance of violation of the NTU Honour Code which could warrant disciplinary actions ranging from failing the assignment, failing the course, suspension and ultimately to expulsion from the University.

Source of contents: http://www.ntu.edu.sg/ai/Pages/academic-integrity-resources.aspx

Matriculation

After you have accepted the offer of admission and obtain your matriculation number, you need to be registered as a student of NTU. To do this, you are required to matriculate online at the NTU website under:

Undergraduate Admission → Part-Time B.Eng → After Acceptance → Online Matriculation

https://sso.wis.ntu.edu.sg/webexe88/owa/sso_login1.asp?t=1&p2=https://wish.wis.ntu.edu.sg/pls/webexe/aus_stars_matriculate.freshmen_survey&pg=

The period for matriculation is from **Wednesday, 17 July 2019 to Tuesday, 23 July 2019 (10am to 10pm)**. Please note that your name will not be in the student records if you do not matriculate online.

All new students will be issued a matriculation card. The card must be collected in person on the following days.

Programme	Date and Time	Venue
Computer Science (Part-Time)	6 August 2019 6pm – 7pm	Tan Chin Tuan Lecture Theatre (NS4-02-36)
	13 – 23 August 2019 Mon to Thu: 9.00am – 5.30pm Fri: 9am – 5pm (Note: No collection on weekends and public holidays)	SCSE Undergraduate Office (N4-02a-32) Note: Please look for Ms Tan Lay Yen or Ms Miya Baji

Registration of Courses

Allocation of Courses

The courses which you will be taking in Semester 1 of AY 2019-20 are allocated to you when you matriculate on-line.

The timetable is shown below:

Day	Course and Timetable Computer Science Year 1 (Part Time)
Monday	**CZ1005 DIGITAL LOGIC**

INDEX	TYPE	GROUP	DAY	TIME	VENUE	REMARK
14502	LEC/STUDIO	PT1	MON	1830-2030	LT4	Starts in Week 1
	TUT	PT1	MON	2030-2130	LT4	Starts in Week 1
	LAB	PT11	MON	1830-2030	HWLAB3	Starts in Week 3
14616	LEC/STUDIO	PT1	MON	1830-2030	LT4	Starts in Week 1
	TUT	PT1	MON	2030-2130	LT4	Starts in Week 1
	LAB	PT12	TUE	1830-2030	HWLAB3	Starts in Week 3

Day	
Tuesday	**No Class**
Wednesday	**CZ1011 ENGINEERING MATHEMATICS I**

INDEX	TYPE	GROUP	DAY	TIME	VENUE	REMARK
14503	LEC/STUDIO	PT1	WED	1830-1930	LT4	Starts in Week 1
	LEC/STUDIO	PT1	WED	1930-2030	LT4	Starts in Week 1
	TUT	PT1	WED	2030-2130	LT4	Starts in Week 1

Day	
Thursday	**CZ1003 INTRODUCTION TO COMPUTATIONAL THINKING**

INDEX	TYPE	GROUP	DAY	TIME	VENUE	REMARK
14501	LEC/STUDIO	PT1	THU	1830-1930	SWLAB1	Starts in Week 1
	SEM	PT1	THU	1930-2030	SWLAB1	Starts in Week 1
	SEM	PT1	THU	2030-2130	SWLAB1	Starts in Week 1

Day	
Friday	**HW0001 INTRODUCTION TO ACADEMIC COMMUNICATION** **Remark: Only for students who fail QET**

INDEX	TYPE	GROUP	DAY	TIME	VENUE	REMARK
14519	TUT	CSPT1	FRI	1900-2100	TR+17	Wk 3-13
14520	TUT	CSPT2	FRI	1900-2100	TR+16	Wk 3-13

Others	GC0001		SUSTAINABILITY: SEEING THROUGH THE HAZE				
	INDEX	TYPE	GROUP	DAY	TIME	VENUE	REMARK
	14516		CSPT1				Online Course
	View and study online. Not required to come to NTU.						

For the subsequent semesters, you have to register for your courses on your own through the *Student Automated Registration System* (STARS).

Registration of Courses through STARS
Before you register for your courses, you are advised to read the instructions pertaining to registration at the Office of Academic Services page on the NTU website.

For general instructions:
Students → Academic Services → Course Registration
http://www.ntu.edu.sg/Services/Academic/undergraduates/Course%20Registration/Pages/default.aspx

Add/Drop Courses
Unless otherwise specified by your School, you will be given an opportunity to de-register a registered course and take another course, if you wish to, during the Add/Drop period.
The Add/Drop Period allocated for Part Time Students:

Tuesday, 13 August 2019 – Sunday, 18 August 2019
(10am – 10pm)

A course that is dropped within the add/drop period will not appear in the official transcript. A student who is still registered for a course after Add/Drop period but did not subsequently sit for the examination, will be deemed to have read and failed the course. 'F' will appear on his official transcript.

For instructions and guide, please check the Office of Academic Services page on the NTU website:

Students → Academic Services → Course Registration → Guide to Add/Drop period
http://www.ntu.edu.sg/Services/Academic/undergraduates/Course%20Registration/Pages/default.aspx

Attendance
All students are to sign in lab/tutorial sessions whenever required.

Quizzes
Some courses will require quiz component to be held during normal lesson hours. Students will be requested to come back to NTU SCSE to take the quiz during day time whenever required.

Examinations
For exam dates of the courses, please check at:

Students → Academic Services → Examination → Examination Timetable
http://www.ntu.edu.sg/Students/Undergraduate/AcademicServices/Examination/Pages/default.aspx

Academic Unit System (AUS)

The University's academic structure for its undergraduate programmes is based on the Academic Unit System (AUS). The main features of the AUS are the semester arrangement of the academic year and the use of academic units (AU) for measuring academic workload and requirement for graduation.

The AUS handbook is available online at the Office of Academic Services page on the NTU website:

Students → Academic Services → Academic Unit System (AUS)
http://www.ntu.edu.sg/Services/Academic/undergraduates/Pages/AcademicUnitSystem(AUS).aspx

Graduation Requirements
The requirements for graduation are as follows:
 a) Successful completion of the prescribed academic unit requirement as set out by the course curriculum
 b) A minimum CGPA of 2.00 at the end of the final semester of study

The criteria for satisfactory academic standing in any given semester are:
 a) Maintaining a minimum CGPA of 2.00
 b) Completing at least 75% of the normal AU workload

Academic Warning, Probation and Termination
Students with poor standing will be subjected to the following performance review:
 • Academic Warning – if the CGPA falls below 2.00 for any given semester
 • Academic Probation – if the CGPA falls below 2.00 for the following semester
 • Academic Termination – if the CGPA falls below 2.00 for the 3rd consecutive semester, or at the end of the final semester of study. A letter of termination will be issued.

Leave of Absence

Short Leave

Students must apply for medical leave or short leave of absence with their respective Schools if they cannot attend classes on the following occasions:

- On days when there are laboratory sessions
- On days when quizzes or tests are conducted during classes
- On any occasion during the Professional Attachment, Industrial Attachment, Professional Internship, Industrial Orientation, Enhanced Industrial Attachment or International Research Attachment Programme
- On any other occasions that tutor(s) or lecturer(s) deemed as compulsory for students' attendance

Categories of Leave Not Approved:
- Returning to home country during festive periods e.g. Chinese New Year, Hari Raya, etc
- Participating in activities (in and outside campus) organised by student bodies

Students are to download and complete the **short leave form**, and submit this with the supporting document(s) to their home School within the stipulated timeframe.

Students → Admin Services → Apply for Short Leave
http://www.ntu.edu.sg/Students/Undergraduate/AdminServices/Pages/Applyforshortleave.aspx

Semester Leave

Students making a new application for semester leave of absence or extending their semester leave of absence are to complete and submit the Application / Extension for Semester Leave of Absence Form with the relevant supporting documents to their School of study.

Details and Application Form are available at the NTU website under:

Students → Admin Services → Apply for Semester Leave
http://www.ntu.edu.sg/Students/Undergraduate/AdminServices/Pages/ApplyforSemesterLeave.aspx

Student Account

Each new student is issued with the following user accounts:

1. A **network account** with username and password:
   This is used to access the campus network, computing facilities, e-learning portal **NTULearn**, one-stop Intranet portal iNTU https://intu.ntu.edu.sg and web-based **StudentLink** (for undergraduates) services. StudentLink services is one-stop e-services for students such as update of personal particulars, course registration, checking of examination seating arrangement and results.

   Upon acceptance of admission offer via the online form, a new student can select a network account username from four pre-assigned names. The **initial password** is set to the matriculation number (with all alphabets in upper-case) of the student. The network account is activated 1 working day after the acceptance of offer online (However, access to StudentLink services will be available only after you have **matriculated** online).

   New students who have not obtained their username may do so from the website: Undergraduate students: https://wis.ntu.edu.sg/pls/webexe/account_creation.logon

   A new student must change his password **immediately** before using any e-services. Please refer to the section "**How to change your network account password**". Failure to do so will result in account suspension. This measure is necessary to safeguard the security of the new account. Suspended account will only be re-activated upon re-registration by the student at the **IT Service Counter** during office hours. Subsequently, the password must be changed every 180 days.

2. An **Office 365 EDU account** with username and password:
   This is used only to access e-mail and other Office 365 EDU services at http://www.outlook.com/e.ntu.edu.sg.

   The Office 365 EDU username is in the form **username@e.ntu.edu.sg** with the same username as the Network Account chosen earlier in (1) above. The initial password is set to the matriculation number (with all alphabets in upper-case) of the student. New student will be prompted to change this password upon first logon to Office 365 EDU. Please note that Office 365 EDU password and network account password are different. Changing one does not affect the other.

   Office 365 EDU account is usually ready for use 1 working day after the acceptance of network account username online.

   As all NTU official emails will be sent to this email box, please ensure that you check your Office 365 EDU email box regularly.

Issuance of Accounts

Please note that no separate letters will be issued to inform new students on their new user accounts. The network and Office 365 accounts are usually ready for use 1 working day after the acceptance of network account username online. However, **access to other e-services such as StudentLink will be available only after you have matriculated online**.

Change of Personal Particulars

For changes in name, citizenship, identification card number, passport number, marital status or national services status, please produce the original identification documents (note: the original re-entry permit together with the identification card for students who convert to Singapore PR) and photocopies to **One Stop @ SAC** located at NS3-01-03, Academic Complex North during the following hours:

8.30am to 5.00pm (Monday – Thursday)

8.30am to 4.45pm (Friday)

Closed on Saturdays, Sundays & Public Holidays

For changes to other personal particulars, addresses and contact numbers, please access StudentLink → Administrative Matters → Change of Personal Particulars to update the changes.

All correspondence from the University will be sent to your postal address. You are required to provide an address in Singapore as your postal address during term time. Failure to do so could lead to important correspondence (including examination results) going astray. The University will not be responsible if official correspondence fails to reach you because you did not give notice of your change of address or provide your postal address.

Withdrawal

Students making an application for withdrawal from the University are to complete and submit the Application for Withdrawal from University (For Undergraduates) Form together with the matriculation card to their School of study.

Students will be informed officially of their withdrawal from the University by email from the Office of Academic Services to their NTU email account. Students may provide other email address to receive the official email.

Details and Withdrawal Form are available at the NTU website under:

Students → Admin Services → Withdraw from University

http://www.ntu.edu.sg/Services/StudentServices/admin/undergraduate/Pages/Withdrawfromcourse.aspx

The matriculation card should be returned to **One Stop @ SAC** once you have withdrawn from the University. Please note that a student who withdraws after the first two weeks of the semester will be liable for the payment of fees for that entire semester.

Academic Calendar AY2019-20

Academic Year 2019-20	From	To	Duration	
Semester 1	26-Jul-19	06-Dec-19	19 weeks	
Freshmen Orientation	26-Jul-19	08-Aug-19	2 weeks	
Qualifying English Test	05-Aug-19	05-Aug-19	1 day	
Part-Time B.Eng Programme Orientation	06-Aug-19	06-Aug-19	1-day	
Teaching Weeks	13-Aug-19	27-Sep-19	7 weeks	(Teaching Week 1 to 7)
Recess Week	30-Sep-19	04-Oct-19	1 week	
Teaching Weeks	07-Oct-19	15-Nov-19	6 weeks	(Teaching Week 8 to 13)
Revision & Examination	18-Nov-19	06-Dec-19	3 weeks	
Vacation	09-Dec-19	10-Jan-20	5 weeks	
Semester 2	13-Jan-20	08-May-20	17 weeks	
Teaching Weeks	13-Jan-20	28-Feb-20	7 weeks	(Teaching Week 1 to 7)
Recess Week	02-Mar-20	06-Mar-20	1 week	
Teaching Weeks	09-Mar-20	17-Apr-20	6 weeks	(Teaching Week 8 to 13)
Revision & Examination	20-Apr-20	08-May-20	3 weeks	
Vacation	11-May-20	11-Aug-20	13 weeks	
Special Term I	11-May-20	19-Jun-20	6 weeks	
Teaching Weeks	11-May-20	12-Jun-20	5 weeks	(Teaching Week 1 to 5)
Revision & Examination	15-Jun-20	19-Jun-20	1 week	

Special Term II	22-Jun-20	31-Jul-20	6 weeks	
Teaching Weeks	22-Jun-20	24-Jul-20	5 weeks	(Teaching Week 1 to 5)
Revision & Examination	27-Jul-20	31-Jul-20	1 week	

Note: Effective 2015, classes will proceed normally on the immediate Monday following a public holiday on Saturday.

Academic Calendar is available at the NTU website under:

Services → Academic → Undergraduate Academic Calendar

http://www.ntu.edu.sg/sasd/oas/AcademicCalendar/Documents/NTU%20Academic%20Calendar_AY2019-20%20(Semester).pdf

Contact Us

No.	Staff/Office	Contact Details
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2	Dr Owen Noel Newton Fernando CS Part Time FYP Coordinator School of Computer Science and Engineering	Office Tel: 6908 3322 Email: OFernando@ntu.edu.sg
3	A/P Chan Syin CS Part Time Academic Mentor (Year 1) Office of Professional Education	Office Tel: 6790 5748 Email: ASSCHAN@ntu.edu.sg
4	Ms Tan Lay Yen Manager (Academic) School of Computer Science and Engineering	Office Tel: 6790 4869 Office Location: N4-02a-32 Email: lytan@ntu.edu.sg
5	General Enquiries Centre for Professional and Continuing Education (PaCE@NTU)	Tel: 6908 1435 Office: SBS-01s-50 Website: pace.ntu.edu.sg
6	Office of Admissions and Financial Aid	Student Services Centre, Level 3 Tel: 6790 5792/5055 Email: adm_local@ntu.edu.sg
7	Academic Advice, Student Counselling, etc	Your Academic Mentor If you do know who your mentor is, please check StudentLink.
8	Network Matters, STARS, PIN, etc	IT Service Desk Tel: 6790 4357 Email: servicedesk@ntu.edu.sg
9	Problems regarding NTULearn	Ms Leong Yin Yoke Junie Email: jyyleong@ntu.edu.sg
10	Payment such as tuition fees, hostel fees, etc	One Stop@SAC (Student Activities Centre) NS3-01-03, Academic Complex North (near OCBC Bank)