

NANYANG TECHNOLOGICAL UNIVERSITY

The Academic Unit System

(updated as at 30 Nov 2004)

1. Academic Calendar

The academic year is divided into two semesters of 17 weeks each. Examinations are held at the end of each semester. There is an Inter-semester Session during the Semester 1 vacation and a Special Session during the Semester 2 vacation.

2. Academic Units

Under the Academic Unit System, each subject is assigned a certain number of academic units (AU).

The academic unit is a measure of the student's work-load associated with both class attendance and preparation. For a typical one-semester subject, the number of academic units is calculated as follows:

(a) one hour of lecture/tutorial per week : 1 AU

(b) 3 hours' laboratory/fieldwork per week : 1 AU

Industrial/Professional Attachment and Professional Internship have durations and number of AU as follows:

| <u>Programme</u> | <u>Duration</u> | <u>AU</u> | <u>Course</u> |
|-------------------------|-----------------|-----------|--|
| Industrial Attachment | 24 weeks | 5 | Engineering, Computer Science Computer Engineering and Materials Engineering |
| Professional Attachment | 8 weeks | 3 | Accountancy and Business |
| Professional Internship | 24 weeks | 5 | Communication Studies |

3. Curricular Requirements

(1) Subjects of Study

The subjects of study in every undergraduate course are classified under 3 categories, namely -

- (a) Core Subjects - these are compulsory subjects required to satisfy course requirements.
- (b) Prescribed Electives - these are subjects for specialisation in a particular degree course.
 - these may also be broadening subjects in humanities & social sciences, science & technology and business & management.
- (c) General Electives - these are subjects chosen by students to broaden their learning experience.

General electives may be taken from the list of subjects offered by the School to which the student belongs or, with the approval of the Dean of the student's School, from subjects offered by other Schools in the University.

Although general electives may be taken in any year of study, students are advised to plan carefully when to take the general electives in order not to delay their graduation.

For the purpose of fulfilling the requirements of the course and for classification of the degree, a subject once confirmed by the student as being registered as a prescribed elective shall not be re-classified as a general elective, and vice-versa.

(2) Pre-requisites

Some subjects may only be offered by students who have obtained at least the specified grade in certain related subjects offered at a lower level. These lower-level subjects are called the "pre-requisites" for the higher-level subjects.

(3) Academic Structure

The number of academic units that students must obtain in order to

graduate (including the required number of general electives as specified) are set out in Appendices I to VII.

(4) Period of Candidature

(i) The period of candidature for each course of study is as follows:

| <u>Courses</u> | <u>Period of Candidature</u> | | |
|---|------------------------------|----------------|----------------|
| | <u>Normal</u> | <u>Minimum</u> | <u>Maximum</u> |
| Accountancy, Business) | 3 years | 3 years | 5 years |
| Bioengineering) | | | |
| Biological Sciences) | | | |
| Chemical & Biomolecular Engineering Civil) | | | |
| Engineering) | | | |
| Communication Studies) | | | |
| Computer Engineering) | | | |
| Computer Science) | | | |
| Economics) | | | |
| Engineering) | 4 years | 3½ years | 7 years |
| Environmental Engineering) | | | |
| Maritime Studies) | | | |
| Materials Engineering) | | | |
| B.A.Dip.Ed.) | | | |
| B.Sc.Dip.Ed.) | | | |
| B.A. (Ed.)) | | | |
| B.Sc.(Ed.)) | | | |

All leave of absence (except approved medical leave) is counted towards the period of candidature.

(ii) For students admitted directly to the second year of a 4-year course, the minimum and the maximum periods shall be 3 years and 5 years respectively.

(iii) Students who transfer credits from another university must comply with the requirements in section 3(6) on page 8.

(5) Classification of Students

Students are classified as Year 1, Year 2, Year 3 and Year 4 students according to the number of academic units earned as shown on the next page. While re-classification is done normally at the end of an academic year, where appropriate, this may be done at the end of the first semester.

Students placed on Academic Warning and Academic Probation will not be re-classified until they have been restored to good academic standing. See Section 5(3) on page 10.

**Classification of Students
For Year 1 Students Admitted in 2003-2004**

| Courses | Number of Academic Units Earned ⁺ | | | |
|-------------------------------------|--|---------|----------------------|-------------------------|
| | Year 1 | Year 2 | Year 3 | Year 4 |
| Accountancy | 0 – 23 | 24 - 53 | 54 & above | NA |
| Business | 0 – 23 | 24 - 53 | 54 & above | NA |
| Bioengineering | 0 – 27 | 28 - 58 | 59 - 87 | [#] 88 & above |
| Biological Sciences | 0 – 22 | 23 - 48 | 49 - 76 | [@] 77 & above |
| Civil Engineering | 0 – 27 | 28 - 59 | 60 - 86 | [#] 87 & above |
| Communication Studies | 0 – 29 | 30 - 60 | [*] 61 - 76 | [@] 77 & above |
| Computer Engineering | 0 – 26 | 27 - 60 | 61 - 82 | [#] 83 & above |
| Electrical & Electronic Engineering | 0 - 27 | 28 - 57 | 58 - 83 | [#] 84 & above |
| Environmental Engineering | 0 - 27 | 28 - 58 | 59 - 86 | [#] 87 & above |
| Materials Engineering | 0 - 27 | 28 - 57 | 58 - 84 | [#] 85 & above |
| Mechanical & Production Engineering | 0 - 27 | 28 - 59 | 60 - 86 | [#] 87 & above |

⁺ Excluding academic units earned for general electives
^{*} Minimum completion of four semesters of study is also required
[@] Minimum completion of six semesters of study is also required
[#] A pass in Industrial Attachment is also required

Classification of Students
For Students Admitted in 2004-2005

| Courses | | Number of Academic Units Earned ⁺ | | | |
|-------------------------------------|---|--|---------|----------------------|-------------------------|
| | | Year 1 | Year 2 | Year 3 | Year 4 |
| Accountancy | | 0 - 23 | 24 - 53 | 54 & above | NA |
| Business | | 0 - 23 | 24 - 53 | 54 & above | NA |
| Bioengineering | Students admitted to First Year Common Engineering | 0 - 26 | 27 - 60 | 61 - 88 | [#] 89 & above |
| | Students admitted directly to Year 2 | - | 0 - 29 | 30 - 58 | [#] 59 & above |
| Biological Sciences | Students admitted to First Year Biological Sciences | 0 - 22 | 23 - 48 | 49 - 76 | [@] 77 & above |
| | Students admitted directly to Year 2 | - | 0 - 22 | 23 - 50 | [@] 51 & above |
| Chemical & Biomolecular Engineering | | 0 - 28 | 29 - 58 | 59 - 84 | [#] 85 & above |
| Civil Engineering | Students admitted to First Year Common Engineering | 0 - 26 | 27 - 58 | 59 - 85 | [#] 86 & above |
| | Students admitted directly to Year 2 | - | 0 - 32 | 33 - 60 | [#] 61 & above |
| Communication Studies | | 0 - 29 | 30 - 60 | [*] 61 - 76 | [@] 77 & above |
| Computer Engineering | | 0 - 23 | 24 - 58 | 59 - 81 | [#] 82 & above |
| Computer Science | | 0 - 23 | 24 - 55 | 56 - 80 | [#] 81 & above |

⁺ Excluding academic units earned for general electives
^{*} Minimum completion of four semesters of study is also required
[@] Minimum completion of six semesters of study is also required
[#] A pass in Industrial Attachment is also required
^{*} For students admitted directly to Year 2 in 2004-2005

Classification of Students
For Year 1 Students Admitted in 2004-2005

| Courses | | Number of Academic Units Earned ⁺ | | | |
|-------------------------------------|---|--|---------|---------|-------------|
| | | Year 1 | Year 2 | Year 3 | Year 4 |
| Economics | | 0 - 17 | 18 - 37 | 38 - 56 | @57 & above |
| Electrical & Electronic Engineering | Students admitted to First Year Common Engineering | 0 - 26 | 27 - 59 | 60 - 85 | #86 & above |
| | Students admitted directly to Year 2 | - | 0 - 31 | 32 - 58 | #59 & above |
| Environmental Engineering | Students admitted to First Year Common Engineering | 0 - 26 | 27 - 57 | 58 - 85 | #86 & above |
| | Students admitted directly to Year 2 | - | 0 - 31 | 32 - 60 | #61 & above |
| Maritime Studies | | 0 - 22 | 23 - 51 | 52 - 84 | ^85 & above |
| Materials Engineering | Students admitted to First Year Materials Engineering | 0 - 25 | 26 - 56 | 57 - 82 | #83 & above |
| | Students admitted directly to Year 2 | - | 0 - 31 | 32 - 57 | #58 & above |
| Mechanical & Production Engineering | Students admitted to First Year Common Engineering | 0 - 26 | 27 - 60 | 61 - 87 | #88 & above |
| | Students admitted directly to Year 2 | - | 0 - 30 | 31 - 57 | #58 & above |

- ⁺ Excluding academic units earned for general electives
- @ Minimum completion of six semesters of study is also required
- # A pass in Industrial Attachment is also required
- ^ A pass in Industrial Immersion is also required
- * For students admitted directly to Year 2 in 2004-2005

**Classification of students
For Students Admitted before 2001-2002**

| Course | Number of Academic Units Earned ⁺ | | | | | | | |
|--|--|---------|----------|-------------|--------------------------|---------|---------|-------------|
| | Primary Specialisation | | | | Secondary Specialisation | | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 1 | Year 2 | Year 3 | Year 4 |
| Arts with Dip Ed (2 Arts Subjects) | 0 - 22 | 23 - 54 | 55 - 92 | 93 & above | 0 - 17 | 18 - 44 | 45 - 80 | 81 & above |
| Arts with Dip Ed (AS1 Arts & AS2 Science) | 0 - 22 | 23 - 59 | 60 - 98 | 99 & above | 0 - 17 | 18 - 48 | 49 - 86 | 87 & above |
| Arts with Dip Ed (PE & Arts subject) | 0 - 26 | 27 - 61 | 62 - 93 | 94 & above | 0 - 23 | 24 - 58 | 59 - 93 | 94 & above |
| Science with Dip Ed (2 Science Subjects) | 0 - 22 | 23 - 63 | 64 - 104 | 105 & above | 0 - 17 | 18 - 53 | 54 - 92 | 93 & above |
| Science with Dip Ed (AS1 Science & AS2 Arts) | 0 - 22 | 23 - 59 | 60 - 98 | 99 & above | 0 - 17 | 18 - 48 | 49 - 86 | 87 & above |
| Science with Dip Ed (PE & Science subject) | 0 - 26 | 27 - 65 | 66 - 99 | 100 & above | 0 - 23 | 24 - 62 | 63 - 99 | 100 & above |

⁺ Excluding academic units earned for general electives.
Also applicable to direct entry students admitted in 2001-2002

**Classification of Students
For Students Admitted with effect from 2001-2002**

| Course | Number of Academic Units Earned ⁺ | | | |
|--|--|---------|---------|------------|
| | Year 1 | Year 2 | Year 3 | Year 4 |
| Arts (Ed) (General) | 0 - 20 | 21 - 53 | 54 - 85 | 86 & above |
| Arts (Ed) (Art) | 0 - 21 | 22 - 52 | 53 - 86 | 87 & above |
| Arts (Ed) (Ch Lang & Lit) | 0 - 18 | 19 - 50 | 51 - 85 | 86 & above |
| Arts (Ed) (Music) | 0 - 23 | 24 - 55 | 56 - 87 | 88 & above |
| Arts (Ed) (Malay Lang & Lit) | 0 - 23 | 24 - 52 | 53 - 80 | 81 & above |
| Science (Ed) (General) | 0 - 20 | 21 - 51 | 52 - 86 | 87 & above |

| | | | | |
|----------------------|-------|--------|--------|------------|
| Science (Ed) (PE) | 0 -26 | 27 -61 | 62 -92 | 93 & above |
|----------------------|-------|--------|--------|------------|

⁺ Excluding academic units earned for general electives

(6) Transfer of Academic Units

With the prior approval of the Dean concerned, students are allowed to take some subjects from another university and transfer the number of AU earned from that university towards fulfilling the degree requirements of this University. Students who have taken some subjects from another university prior to their admission to this University may apply for transfer of credits earned.

To be eligible for the award of a Bachelor's degree of this University, a student must fulfil the following conditions:

- (a) (i) for the degree of B.Acc. or B.Bus., complete not less than two academic years of study at the University and obtain from the University not less than 65% of the required number of academic units for the degree.
- (ii) for the degree of B.A.(Hons), B.Eng, B.Sc(Hons.), B.Sc. (Maritime Studies) or B.Comm.Studies(Hons.), complete not less than three academic years of study at the University and obtain from the University not less than 75% of the required number of academic units for the degree.
- (iii) for a student admitted directly to the second year of a 4-year course, complete not less than three academic years of study at the University and obtain from the University not less than 65% of the required number of academic units for the degree.
- (b) pass all or been exempted from some of the examinations prescribed by the Statute governing the degree;
- (c) Satisfy all other requirements prescribed by the Statute governing the degree.

Marks obtained for credits earned in other institutions are not counted in the classification of the degree awarded.

4. Registration of Subjects

(1) Students Automated Registration System

Except where the subjects to be taken by students in any semester are allocated by the Office of Academic Services, all students must register their subjects through the Students Automated Registration System (STARS) according to the schedule announced by the Office of Academic Services.

Students who join any classes without registration through STARS will be barred from taking the examination(s) for the subject(s) involved.

(2) Add/Drop Subjects

Students may add or drop any subject provided this is done within the add/drop period as may be announced by the Office of Academic Services.

A subject that is dropped within the add/drop period will not appear in the official transcript.

A student who drops a subject after the add/drop period will be deemed to have sat the subject and failed. 'F' will appear on his official transcript and '0' mark will be used in the computation of marks.

(3) Academic Load

In order to complete the degree requirements within the normal specified period of 3 or 4 academic years, full-time students at NTU are expected to carry an academic load of 16 to 21 AU per semester (approximately 4 to 6 subjects).

Subject to approval by the Dean concerned, students may be allowed to take up to 8 AU (approximately two subjects) more or less than the normal semester academic load to enable them to pursue their studies at a pace commensurate with their needs and/or capabilities.

(4) Restricted Repeat

Final Year students, who have failed any core subject which are not offered in the semester following the failure, may be permitted to take the failed subject(s) as restricted repeat(s). This arrangement is available only for Final Year core subjects which students cannot replace with any other subjects offered in the following semester. Additionally, only Final Year students deemed to have sufficient AU to meet graduation requirements will be eligible for restricted repeat(s).

5. Examinations and Grades

(1) Examinations

An examination for each of the subjects offered in the semester is held at the end of the semester.

Students are not allowed to improve on the grades of subjects they have passed. The grades for all attempts in any subject taken by a

student are shown in his official transcript.

(2) Gradings

(a) The grading system is as follows:

| | | |
|------|---|--|
| Dist | - | Distinction (applicable to Engineering, Computer Engineering, Materials Engineering and Biological Sciences courses only) |
| A | - | Excellent |
| B | - | Very Good |
| C | - | Good |
| D | - | Pass |
| E | - | Marginal Fail |
| F | - | Fail |

No academic unit is earned for grade 'E' or 'F'. A student is not permitted to offer a subject which has a pre-requisite unless he has obtained a minimum of grade 'E' in the pre-requisite subject.

- (b) A student who obtains 'E' or 'F' for any subject that is a pre-requisite for a higher level subject must repeat the failed subject on the next occasion it is offered.
- (c) A student who obtains 'E' for a subject but passes the higher level subject for which it is a pre-requisite, will not be allowed to proceed to the next higher level of the subject until he passes the basic pre-requisite subject. This requirement may be waived by the Dean concerned.

(3) Academic Warning, Probation and Dismissal

- (a) A student will be given an academic warning if he obtains 40% or more but less than 50% of the total number of AU he takes in a semester, inclusive of general electives.
- (b) A student will be placed on academic probation if:
- he fails to restore himself to good standing in the consecutive semester following the issue of an academic warning, or
 - he obtains less than 40% of the total number of AU he takes in a semester, inclusive of general electives.

- (c) A student will be refused re-admission to his course of study if he is placed on academic probation for two consecutive semesters and fails to restore himself to good standing in the following semester.
- (d) (i) To be restored to good standing, a student on academic warning or probation must obtain at least 50% of the total number of AU he takes in the following semester.
- (ii) Except that if a student proceeds on Industrial Attachment or Professional Internship in the semester immediately following an academic warning or probation, he shall be restored to good standing if he obtains at least 50% of the total number of AU he takes in the next consecutive semester.
- (e) The rules on warning, probation and dismissal will also apply to:-
- (i) a student on an exchange programme
- (ii) a student on leave of absence. The academic status of such a student prior to his leave will be counted towards dismissal if he fails to restore himself to good standing when he resumes his studies.
- (f) The processes are summarised in the table below:

| SEMESTER | % OF TOTAL AU OFFERED | ACADEMIC STATUS |
|--------------------------|-----------------------|-------------------------------------|
| Situation A | | |
| Original semester | Between 40 and 49 | Academic Warning |
| 2nd consecutive semester | Less than 50 | Academic Probation |
| 3rd consecutive semester | Less than 50 | Academic Probation |
| 4th consecutive semester | Less than 50 | Dismissal (Refused Re-admission) |
| Situation B | | |
| Original semester | Less than 40 | Academic Probation |
| 2nd consecutive semester | Less than 50 | Academic Probation |

| | | |
|--------------------------|--------------|-------------------------------------|
| 3rd consecutive semester | Less than 50 | Dismissal (Refused Re-admission) |
|--------------------------|--------------|-------------------------------------|

N.B. Percentage of AU obtained during Industrial Attachment, Professional Internship or Inter-semester session shall not be considered for restoration to good standing

(4)

Classification of Degree

(a) Degrees are classified as follows:

| Degree | Classification |
|--|--|
| B.Acc. B.Bus. | 1st Class Hons. 2nd Class Hons. (Upper) 2nd Class Hons. (Lower) Pass with Merit Pass |
| B.Eng. B.Eng. (Comp. Eng.) B.Eng. (Matl. Eng.) B.Sc (Maritime Studies) B.A.(Ed.) B.Sc.(Ed.) | 1st Class Hons 2nd Class Hons. (Upper) 2nd Class Hons. (Lower) 3rd Class Hons. Pass with Merit Pass |
| B.A.Dip.Ed. B.Sc.Dip.Ed. | Pass with Merit Pass |
| B.Comm.Studies (Hons.) B.A. (Hons.) B.Sc (Hons.) | 1st Class Hons. 2nd Class Hons. (Upper) 2nd Class Hons. (Lower) 3rd Class Hons. |
| * B.A. (Hons.) | 1st Class Hons. 2nd Class Hons. (Upper) 2nd Class Hons. (Lower) 3rd Class Hons. Pass |

* For students admitted to the Economics course w.e.f. 2004-05

- (b) The classification of degrees is based on the marks obtained for all core subjects and prescribed electives taken in the first attempt throughout the course of study. Marks obtained for general electives and for credits earned in other approved institutions are not included in the calculation for the classification of degrees.
- (c) A student who does not complete his course of study within the normal period of candidature (except for approved medical leave) is not eligible for the award of Honours .

**A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Year 1 Students Admitted from 2001-2002 to 2002-2003**

| Course | Year of Study | Number of Academic Units (AU) | | | |
|---|---------------|-------------------------------|----------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Accountancy | 1 | 32 | | | 103 |
| | 2) | 63 | 4 | | |
| | 3) | | | 4 | |
| Business | 1 | 32 | | | 103 |
| | 2) | 55/43*/39* | 12/24*/28* | | |
| | 3) | | | 4 | |
| Biological Sciences | 1 | 30 | | | 139 |
| | 2 | 31 | | | |
| | 3 | 33 | | | |
| | 4 | 21 | 16 | 8 | |
| Civil & Environmental Engineering | 1 | 37 | | | 146 |
| | 2 | 39 | | | |
| | 3 | 24 | | | |
| | 4 | 34 | 6 | 6 | |
| Communication Studies | 1 | 32 | 8 | | 137 |
| | 2 | 16/12 [⊗] | 20/24 [⊗] | | |
| | 3 | 9 | 8 | | |
| | 4 | 12 | 8 | 24 | |
| Computer Engineering | 1 | 36 | | | 148 |
| | 2 | 40 | | | |
| | 3 | 24 | | | |
| | 4 | 14 | 28 | 6 | |
| Electrical & Electronic Engineering | 1 | 37 | | | 146 |
| | 2 | 38 | | | |
| | 3 | 24 | | | |
| | 4 | 25 | 16 | 6 | |
| Materials Engineering | 1 | 37 | | | 139 |
| | 2 | 37 | | | |
| | 3 | 25 | | | |
| | 4 | 19 | 15 | 6 | |
| Mechanical & Production Engineering | 1 | 37 | | | 146 |
| | 2 | 38 | | | |
| | 3 | 26 | | | |
| | 4 | 26 | 12 | 7 | |
| Mechanical & Production Engineering - Specialisation in Design | 1 | 37 | | | 147 |
| | 2 | 38 | | | |
| | 3 | 26 | | | |
| | 4 | 33 | 6 | 7 | |
| Mechanical & Production Engineering - Specialisation in Mechatronics | 1 | 37 | | | 147 |
| | 2 | 38 | | | |
| | 3 | 27 | | | |
| | 4 | 29 | 9 | 7 | |

⊗ Applicable to students admitted with effect from 2002-2003

- * Applicable to Banking & Finance students admitted with effect from 2002:2003
- * Applicable to Information Technology students admitted with effect from 2002:2003

Appendix II

**A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Year 1 Students Admitted in 2003-2004**

| Course | Year of Study | Number of Academic Units (AU) | | | |
|-------------------------------------|---------------|-------------------------------------|----------------------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Accountancy | 1 | 32 | | | 103 |
| | 2) | 59 | 4 | | |
| | 3) | | | 8 | |
| Business | 1 | 32 | | | 103 |
| | 2) | 55/43 [*] /39 [*] | 12 [*] /16 [*] | | |
| | 3) | | | 16 | |
| Bioengineering | 1 | 37 | | | 156 |
| | 2 | 37 | | | |
| | 3 | 30 | 3 | | |
| | 4 | 16 | 24 | 9 | |
| Biological Sciences | 1 | 30 | | | 139 |
| | 2 | 31 | | | |
| | 3 | 33 | | | |
| | 4 | 21 | 16 | 8 | |
| Civil Engineering | 1 | 37 | | | 154 |
| | 2 | 35 | 3 | | |
| | 3 | 28 | 3 | | |
| | 4 | 24 | 15 | 9 | |
| Communication Studies | 1 | 32 | 8 | | 137 |
| | 2 | 16/12 [⊙] | 20/24 [⊙] | | |
| | 3 | 9 | 8 | | |
| | 4 | 12 | 8 | 24 | |
| Computer Engineering | 1 | 36 | | | 148 |
| | 2 | 40 | | | |
| | 3 | 24 | | | |
| | 4 | 14 | 28 | 6 | |
| Electrical & Electronic Engineering | 1 | 37 | | | 151 |
| | 2 | 32 | 3 | | |
| | 3 | 21 | 9 | | |
| | 4 | 18 | 22 | 9 | |
| Environmental Engineering | 1 | 37 | | | 154 |
| | 2 | 34 | 3 | | |
| | 3 | 29 | 3 | | |
| | 4 | 24 | 15 | 9 | |
| Materials Engineering | 1 | 37 | | | 145 |
| | 2 | 31 | 5 | | |
| | 3 | 27 | 3 | | |
| | 4 | 21 | 15 | 6 | |

⊙ Applicable to students admitted with effect from 2002:2003

* Applicable to Banking & Finance students admitted with effect from 2003:2004

* Applicable to Information Technology students admitted with effect from 2003/2004

A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Year 1 Students Admitted in 2003-2004

| Course | Year of Study | Number of Academic Units (AU) | | | |
|---|---------------|-------------------------------|----------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Mechanical & Production Engineering | 1 | 37 | | | 154 |
| | 2 | 35 | 3 | | |
| | 3 | 25 | 6 | | |
| | 4 | 24 | 15 | 9 | |
| Mechanical & Production Engineering - Specialisation in Design | 1 | 37 | | | 154 |
| | 2 | 34 | 3 | | |
| | 3 | 26 | 6 | | |
| | 4 | 30 | 9 | 9 | |
| Mechanical & Production Engineering - Specialisation in Mechatronics | 1 | 37 | | | 154 |
| | 2 | 38 | 3 | | |
| | 3 | 27 | 6 | | |
| | 4 | 22 | 12 | 9 | |

A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Year 1 Students Admitted in 2004-2005

| Course | Year of Study | Number of Academic Units (AU) | | | |
|-------------------------------------|---------------|-------------------------------|----------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Accountancy | 1 | 32 | | | 103 |
| | 2) | 59 | 4 | | |
| | 3) | | | 8 | |
| Business | 1 | 32 | | | 103 |
| | 2) | 55/43*/39* | 12*/16* | | |
| | 3) | | | 16 | |
| Bioengineering | 1 | 30 | 6 | | 155 |
| | 2 | 40 | | | |
| | 3 | 30 | 3 | | |
| | 4 | 16 | 21 | 9 | |
| Biological Sciences | 1 | 30 | | | 139 |
| | 2 | 31 | | | |
| | 3 | 33 | | | |
| | 4 | 21 | 16 | 8 | |
| Chemical & Biomolecular Engineering | 1 | 33 | 6 | | 156 |
| | 2 | 29 | 6 | | |
| | 3 | 26 | 3 | | |
| | 4 | 29 | 15 | 9 | |
| Civil Engineering | 1 | 30 | 6 | | 153 |
| | 2 | 35 | 3 | | |
| | 3 | 28 | 3 | | |
| | 4 | 24 | 15 | 9 | |
| Communication Studies | 1 | 32 | 8 | | 137 |
| | 2 | 12 | 24 | | |
| | 3 | 9 | 8 | | |
| | 4 | 12 | 8 | 24 | |
| Computer Engineering | 1 | 32 | | | 154 |
| | 2 | 42 | | | |
| | 3 | 25 | | | |
| | 4 | 16 | 24 | 15 | |
| Computer Science | 1 | 32 | | | 154 |
| | 2 | 38 | | | |
| | 3 | 29 | | | |
| | 4 | 16 | 24 | 15 | |
| Economics | 1 | 15 | | | 131 |
| | 2 | 9 | | | |
| | 3 | | | | |
| | 4 | 8 | 66 | 33 | |

* Applicable to Banking & Finance students admitted with effect from 2004-2005

* Applicable to Information Technology students admitted with effect from 2004-2005

A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Year 1 Students Admitted in 2004-2005

| Course | Year of Study | Number of Academic Units (AU) | | | |
|---|---------------|-------------------------------|----------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Electrical & Electronic Engineering | 1 | 30 | 6 | | 154 |
| | 2 | 36 | 3 | | |
| | 3 | 21 | 9 | | |
| | 4 | 21 | 19 | 9 | |
| Environmental Engineering | 1 | 30 | 6 | | 153 |
| | 2 | 34 | 3 | | |
| | 3 | 29 | 3 | | |
| | 4 | 24 | 15 | 9 | |
| Maritime Studies | 1 | 24 | 6 | | 147 |
| | 2 | 29 | 6 | | |
| | 3 | 34 | 6 | | |
| | 4 | 21 | 12 | 9 | |
| Materials Engineering | 1 | 28 | 6 | | 146 |
| | 2 | 31 | 6 | | |
| | 3 | 27 | 3 | | |
| | 4 | 21 | 15 | 9 | |
| Mechanical & Production Engineering | 1 | 30 | 6 | | 155 |
| | 2 | 37 | 3 | | |
| | 3 | 25 | 6 | | |
| | 4 | 27 | 12 | 9 | |
| Mechanical & Production Engineering - Specialisation in Design | 1 | 30 | 6 | | 155 |
| | 2 | 36 | 3 | | |
| | 3 | 26 | 6 | | |
| | 4 | 33 | 6 | 9 | |
| Mechanical & Production Engineering - Specialisation in Mechatronics | 1 | 30 | 6 | | 155 |
| | 2 | 40 | 3 | | |
| | 3 | 27 | 3 | | |
| | 4 | 25 | 12 | 9 | |

**A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Direct Entry Students Admitted in 2002-2003 & 2003-2004**

| Course | Year of Study | Number of Academic Units (AU) | | | |
|---|---------------|-------------------------------|----------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Biological Sciences | 2 | 31 | 16 | 8 | 109 |
| | 3 | 33 | | | |
| | 4 | 21 | | | |
| Civil & Environmental Engineering | 2 | 43 | 6 | 2 | 109 |
| | 3 | 24 | | | |
| | 4 | 34 | | | |
| Electrical & Electronic Engineering | 2 | 42 | 16 | 2 | 109 |
| | 3 | 24 | | | |
| | 4 | 25 | | | |
| Materials Engineering | 2 | 41 | 15 | 2 | 102 |
| | 3 | 25 | | | |
| | 4 | 19 | | | |
| Mechanical & Production Engineering | 2 | 42* | 12 | 3* | 109 |
| | 3 | 26 | | | |
| | 4 | 26 | | | |
| Mechanical & Production Engineering - Specialisation in Design | 2 | 42* | 6 | 3* | 110 |
| | 3 | 26 | | | |
| | 4 | 33 | | | |
| Mechanical & Production Engineering - Specialisation in Mechatronics | 2 | 42* | 9 | 3* | 110 |
| | 3 | 27 | | | |
| | 4 | 29 | | | |

* Academic Units are subject to changes for students with certain diploma qualifications

A Summary of
Academic Unit Requirements for Degree Courses at NTU
For Direct Entry Students Admitted in 2004-2005

| Course | Year of Study | Number of Academic Units (AU) | | | |
|---|---------------|-------------------------------|----------------------|-------------------|-------|
| | | Core Subjects | Prescribed Electives | General Electives | Total |
| Bioengineering | 2 | 37 | 3 | | 119 |
| | 3 | 30 | 3 | | |
| | 4 | 13 | 24 | 9 | |
| Biological Sciences | 2 | 31 | | | 109 |
| | 3 | 33 | | | |
| | 4 | 21 | 16 | 8 | |
| Civil Engineering | 2 | 41 | 3 | | 117 |
| | 3 | 28 | 3 | | |
| | 4 | 24 | 15 | 3 | |
| Electrical & Electronic Engineering | 2 | 42 | | | 116 |
| | 3 | 25 | 6 | | |
| | 4 | 21 | 22 | 0 | |
| Environmental Engineering | 2 | 40 | 3 | | 117 |
| | 3 | 29 | 3 | | |
| | 4 | 24 | 15 | 3 | |
| Materials Engineering | 2 | 37 | 5 | | 111 |
| | 3 | 27 | 3 | | |
| | 4 | 21 | 15 | 3 | |
| Mechanical & Production Engineering | 2 | 44*/41# | | | 117 |
| | 3 | 25 | 6 | | |
| | 4 | 27 | 12 | 3*/6# | |
| Mechanical & Production Engineering - Specialisation in Design | 2 | 43*/40# | | | 117 |
| | 3 | 26 | 6 | | |
| | 4 | 33 | 6 | 3*/6# | |
| Mechanical & Production Engineering - Specialisation in Mechatronics | 2 | 47*/44# | | | 117 |
| | 3 | 27 | 6 | | |
| | 4 | 25 | 9 | 3*/6# | |

* For polytechnic graduates with non-mechanical engineering diplomas

For polytechnic graduates with mechanical engineering diplomas

A Summary of
Academic Unit Requirements for Degree Courses at NIE
For Students Admitted before 2001-2002

| Course | Year of Study | Number of Academic Units (AU) | | | | | |
|--------|---------------|-------------------------------------|-------------------|-------|-------------------------------------|-------------------|-------|
| | | Primary Specialisation | | | Secondary Specialisation | | |
| | | Core Modules & Prescribed Electives | General Electives | Total | Core Modules & Prescribed Electives | General Electives | Total |
| | | | | | | | |

| | | | | | | | |
|--|---|----|---|-----|----|----|-----|
| Arts with Dip.Ed. (2 Arts subjects) | 1 | 30 | | | 24 | | |
| | 2 | 33 | | | 27 | | |
| | 3 | 39 | | | 39 | | |
| | 4 | 21 | 6 | 129 | 27 | 12 | 129 |
| Arts with Dip.Ed. (AS1 Arts & AS2 Science) | 1 | 30 | | | 24 | | |
| | 2 | 39 | | | 33 | | |
| | 3 | 39 | | | 39 | | |
| | 4 | 21 | 6 | 135 | 33 | 6 | 135 |
| Arts with Dip.Ed. (PE and Arts subject) | 1 | 35 | | | 32 | | |
| | 2 | 35 | | | 35 | | |
| | 3 | 32 | | | 36 | | |
| | 4 | 24 | 6 | 132 | 29 | 3 | 135 |
| Science with Dip.Ed. (2 Science subjects) | 1 | 30 | | | 24 | | |
| | 2 | 45 | | | 39 | | |
| | 3 | 39 | | | 39 | | |
| | 4 | 27 | 6 | 147 | 39 | 6 | 147 |
| Science with Dip.Ed. (AS1 Science & AS2 Arts) | 1 | 30 | | | 24 | | |
| | 2 | 39 | | | 33 | | |
| | 3 | 39 | | | 39 | | |
| | 4 | 27 | 6 | 141 | 33 | 12 | 141 |
| Science with Dip.Ed. (PE and Science subject) | 1 | 35 | | | 32 | | |
| | 2 | 41 | | | 41 | | |
| | 3 | 32 | | | 36 | | |
| | 4 | 24 | 6 | 138 | 35 | 3 | 147 |

Note: Also applicable to direct entry students admitted in 2001-2002

**A Summary of
Academic Unit Requirements of Degree Courses at NIE
For Students Admitted with effect from 2001-2002**

| Course | Year of Study | Number of Academic Units (AU) | | | |
|--|---------------|-------------------------------------|----|-------------------|----------|
| | | Core Modules & Prescribed Electives | | General Electives | Total |
| Arts (Ed) (General) | | G1* | G2 | 6 | 135*/129 |
| | 1 | 28 | 30 | | |
| | 2 | 34 | 32 | | |
| | 3 | 35 | 32 | | |
| | 4 | 32 | 29 | | |
| Arts (Ed) (Art Specialisation) | | A1 | A2 | 6 | 135 |
| | 1 | 33 | 29 | | |
| | 2 | 32 | 33 | | |
| | 3 | 34 | 36 | | |
| | 4 | 30 | 31 | | |
| Arts (Ed) (Chinese Language & Literature Specialisation) | | C1 | C2 | 9 | 135 |
| | 1 | 29 | 25 | | |
| | 2 | 33 | 34 | | |
| | 3 | 34 | 36 | | |
| | 4 | 30 | 31 | | |
| Arts (Ed) (Malay Language & Literature Specialisation) | 1 | 31 | | 12 | 130 |
| | 2 | 29 | | | |
| | 3 | 28 | | | |
| | 4 | 30 | | | |
| | | | | | |
| Arts (Ed) (Music Specialisation) | | M1 | M2 | 6 | 135 |
| | 1 | 36 | 32 | | |
| | 2 | 32 | 33 | | |
| | 3 | 31 | 33 | | |
| | 4 | 30 | 31 | | |
| Science (General) | 1 | S1 | S2 | 6 | 135 |
| | 2 | 28 | 30 | | |
| | 3 | 34 | 32 | | |
| | 4 | 35 | 35 | | |
| | | 32 | 32 | | |
| Science (PE and Sports Science Specialisation) | | P1 | P2 | 6 | 135 |
| | 1 | 39 | 35 | | |
| | 2 | 35 | 36 | | |
| | 3 | 30 | 32 | | |
| | 4 | 25 | 26 | | |

| <u>Note:</u> | Academic Subject (AS) | Curriculum Studies (CS) |
|--------------|--|-------------------------|
| G1 - | For students offering AS in English Language & Literature | |
| G2 - | For students offering AS in Geography or History | |
| A1 - | For students offering CS2: English/Mathematics and CS3: Mathematics/English | |
| A2 - | For students offering CS2: English/Mathematics and CS3: Science/Social Studies | |
| C1 - | For students offering CS3: English/Mathematics | |
| C2 - | For students offering CS3: Science/Social Studies/Chinese Language A | |
| S1 - | For students offering AS: Mathematics | |
| S2 - | For students offering AS: Physics with Chemistry or Biology | |
| P1 - | For students offering CS2: English/Mathematics and CS3: Mathematics/English | |
| P2 - | For students offering CS2: English/Mathematics and CS3: Science/Social Studies | |