WOLLONGONG UNIVERSITY COLLEGE

HANDBOOK 1969

the university of new south wales
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Looking south. The Engineering Building is on the right, and the building in the background is the Science and Metallurgy Building.
Introduction

Wollongong University College was established as a College of the University of New South Wales in May, 1961, under the provisions of The Technical Education and University of New South Wales Act, 1949, as amended, which gives the Council the power to 'establish and maintain branches, departments or colleges of the University at Wollongong, Broken Hill or such other place in the State as the Council deems fit'. The Council has established the Wollongong University College Council to advise it on all matters affecting the College; and a Board of Studies to consider and report upon matters relating to the academic programme of Wollongong University College.

In March, 1962, the College moved to its present site at North Wollongong. The site, which occupies about fifty-five acres, is approximately two miles from the centre of the City of Wollongong.

At present, the first year or early years of most courses (with the exception of Architecture, Building, Town Planning, Surveying and Social Work) offered by the University of New South Wales are available at Wollongong. In addition, post-graduate work may also be undertaken. Specific details regarding the availability of courses at Wollongong are listed in another section of this handbook.

The identity of the courses at the College with those offered by the University of New South Wales at other centres makes possible the ready transfer of students, and the proximity to Sydney enables the staff of the College to be in close association with the parent University at Kensington.

This handbook has been specially designed as a source of reference for students at Wollongong, and will prove useful for consultation throughout the first year. However, it should be read in conjunction with the University calendar where complete details regarding courses, staff membership, scholarships, etc., can be found.
Principal Dates

1969

Term 1 (11 weeks) ........................................ 3rd March to 17th May.
Term 2 (10 weeks) .......................................... 2nd June to 9th August.
Term 3 (9 weeks) ........................................ 1st September to 1st November.

Annual Examinations—
   24-week courses .................................. 20th September to 4th October.
   30-week courses .................................. 8th November to 29th November.

January
   Monday 27 ........................................ Australia Day—Public Holiday.
   Tuesday 28 to Saturday 8 February .......... Deferred Examinations.

February
   Monday 17 to Friday 20 ....................... Enrolment period for new first year students.
   Monday 24 to Friday 28 ....................... Enrolment period for re-enrolling students.

March
   Monday 3 ........................................ First term lectures commence.
   Friday 14 ...................................... Last day for acceptance of enrolment for new students (late fee payable).
   Friday 28 ...................................... Last day of acceptance of enrolments of students re-enrolling (late fee payable).

April
   Friday 4 to Monday 7 ........................... Easter Holidays.
   Friday 11 ......................................... Graduation Ceremony.
   Friday 25 ......................................... Anzac Day—Public Holiday.

May
   Saturday 17 ...................................... First term ends.

June
   Monday 2 ........................................ Second term commences.
   Monday 16 ...................................... Queen’s Birthday—Public Holiday.

July
   Friday 18 ...................................... Last day for acceptance of corrected enrolment details forms.

August
   Saturday 9 ...................................... Second term ends.
September
  Monday 1 ........................................
  Saturday 20 .....................................

  Third term commences.
  Annual examinations commence — 24-week courses.

October
  Saturday 4 ........................................
  Monday 6 ........................................

  Annual examinations end — 24-week courses.
  Eight Hour Day—Public Holiday.

November
  Saturday 1 ........................................
  Saturday 8 to Saturday 29 ....................

  Third term lectures cease.
  Annual examinations—30-week courses.

1970

Term 1 (11 weeks) ................................
Term 2 (10 weeks) ................................
Term 3 (9 weeks) ..................................

January
  Monday 26 ........................................
  Tuesday 27 to Saturday 7 February ..............

  Australia Day—Public Holiday.
  Deferred examinations.

March
  Monday 2 ........................................

  First term lectures commence.

COMMITTEE MEETINGS

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<tr>
<th>Board of Studies</th>
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<tr>
<td>Friday, 18th April</td>
<td>2.15</td>
<td>Thursday, 2nd October 9.15</td>
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<tr>
<td>Friday, 4th July</td>
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<td>Thursday, 6th November 9.15</td>
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<td>Friday, 19th September</td>
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<td>Thursday, 4th December 9.15</td>
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<th>Executive of Board of Studies</th>
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<tr>
<td>Friday, 11th April</td>
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<td>Friday, 12th September</td>
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<td>Monday, 24th March</td>
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<td>Monday, 5th May</td>
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<td>Monday, 30th June</td>
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<td>Monday, 1st September</td>
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<td>Tuesday, 19th August</td>
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<td>Tuesday, 16th September</td>
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<td>Tuesday, 21st October</td>
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<td>Tuesday, 18th November</td>
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WOLLONGONG UNIVERSITY COLLEGE COUNCIL

The Wollongong University College Advisory Committee will shortly be replaced by the newly-constituted Wollongong University College Council. At the time of publication, the complete membership of the new Council was not known because, under the terms of appointment, two members of the academic staff of the Wollongong University College have still to be elected to the Council.
Staff

WARDEN
Professor C. A. M. Gray, Hon.JMN, BSc ME Syd., MIMechE, AMICE, AMIEAust, Emeritus Professor, University of Malaya

SENIOR ADMINISTRATIVE OFFICER
D. J. Webster, BA N.Z.

ADMINISTRATIVE ASSISTANTS
M. J. Boland, AASA
J. F. White, BA N.E.

LIBRARIAN
D. A. R. Kemp, BA Durh., DipLib Lond., FLA ALAA

DIVISION OF BIOLOGICAL AND CHEMICAL SCIENCE

ASSOCIATE PROFESSOR AND ACTING HEAD OF DIVISION
E. Gellert, DrPhil Basle, FRACI

DEPARTMENT OF CHEMISTRY

PROFESSOR OF CHEMISTRY
Vacant

SENIOR LECTURERS
P. D. Bolton, BSc Exe., PhD Lond., ARIC, ARACI
F. M. Hall, MSc N.S.W., ASTC., ARACI

LECTURERS
J. Ellis, BSc Syd., PhD N.S.W.
W. K. Hannan, MSc Syd.
E. Kokot, BSc PhD N.S.W., ARACI
G. M. Mockler, BSc PhD N.S.W.

SENIOR TUTORS
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R. Rudzats, MSc N.S.W., ASTC, ARACI, ARIC

DIVISION OF COMMERCE

ACTING HEAD OF DIVISION
Professor C. A. M. Gray, Hon.JMN, BSc ME Syd., MIMechE, AMICE, AMIEAust, Emeritus Professor, University of Malaya

DEPARTMENT OF ACCOUNTANCY

LECTURERS
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E. D. Moore, BCom N.S.W., AASA, ACIS

DEPARTMENT OF ECONOMICS

PROFESSOR OF ECONOMICS
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LECTURERS
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J. C. Steinke, MA Calif.

RESEARCH ASSISTANT
B. W. Ross
DIVISION OF ENGINEERING AND METALLURGY

PROFESSOR OF ENGINEERING AND HEAD OF DIVISION OF ENGINEERING
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DEPARTMENT OF ELECTRICAL ENGINEERING

PROFESSOR OF ELECTRICAL ENGINEERING
Vacant

SENIOR LECTURER
O. J. Tassicker, MEE Melb., MIEAust, FIEE

LECTURERS
W. H. Charlton, BE N.S.W., ASTC, MIEE, AMIEAust
Z. Herceg, DipEng Zagreb, AMIEAust

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ASSOCIATE PROFESSORS
S. E. Bonamy, BE Syd., MSc Birm., PhD N.S.W., ASTC, MIMechE, AMIEAust
A. W. Roberts, BE PhD N.S.W., ASTC, AMIEAust, AMIMechE

SENIOR LECTURERS
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P. Van der Werf, ME PhD N.S.W., ASTC, AMIEAust

LECTURERS
P. C. Arnold, BE N.S.W., AMIEAust
M. J. Lowrey, BE N.S.W., ASTC, AMIEAust
R. T. Wheway, BE PhD N.S.W., AMIEAust

PROFESSIONAL OFFICER
R. M. Kinnell, ASTC, AMIEAust

DEPARTMENT OF METALLURGY

PROFESSOR OF METALLURGY
Vacant

ASSOCIATE PROFESSOR
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N. Standish, MSc N.S.W., PhD Otago, ASTC, ANZIC, AMAusIMM

LECTURERS
M. Atkinson, BSc(Eng) Lond.
T. W. Barnes, MSc N.S.W., ASTC, AIM, AMAusIMM
N. Salasoo, BSc N.S.W., ASTC, AMAusIMM

TEACHING FELLOW
S. Marich, BSc N.S.W.

DIVISION OF ENGLISH AND HEAD OF DIVISION

P. K. Elkin, BA DipEd Syd., BLitt DPhil Oxon.
DEPARTMENT OF ENGLISH

Lecturers
M. Valerie Beers, MA BEd DipEd Melb.
Mrs. Geraldine V. MacNeill, MA N.Z.

Tutor
Mrs. Isabel S. Sharp, BA DipEd Syd.

DEPARTMENT OF GENERAL STUDIES

Lecturer
D. J. Dillon-Smith, MA DipEd Syd.

DIVISION OF PHYSICAL SCIENCE

Professor of Mathematics and Head of Division
A. Keane, MSc Syd., PhD N.S.W.

DEPARTMENT OF GEOLOGY

Senior Lecturer
A. C. Cook, MA Cantab., AMAusIMM, FGS

Lecturer
E. R. Phillips, BSc PhD Qld.

Tutor
R. A. Facer, BSc Syd.

DEPARTMENT OF MATHEMATICS

Associate Professor
C. A. Wilkins, MSc N.Z., PhD N.S.W.

Senior Lecturer
A. E. Chapman, MSc Lond.

Lecturers
D. J. Clarke, BSc W.Aust., MSc Adel.
T. S. Horner, BSc DipEd Syd.

Teaching Fellow
C. Chiarella, MSc Syd.

Tutor
J. Goozeff, BSc Syd.

DEPARTMENT OF PHYSICS

Professor of Physics
R. G. Giovanelli, DSc Syd., FAA, FAIP, FRAS

Senior Lecturer
K. J. Ausburn, BSc Syd., MSc Lond., PhD N.S.W., DIC, AInstP

Lecturers
J. N. Mathur, MSc Alg., DrRerNat Kiel
A. I. Segal, BSc Melb., GradAIP
J. N. Stephens, MA Cantab., PhD N.S.W., GradAIP, AMInstF

Tutor
J. L. K. Lising, BSc N.S.W.
DIVISION OF SOCIAL SCIENCES

PROFESSOR OF HISTORY AND HEAD OF DIVISION
R. Duncan, MA Adel.

DEPARTMENT OF EDUCATION

SENIOR LECTURER
B. V. Hill, BA BEd WAust., MA Syd., MACE

LECTURER
Vacant

DEPARTMENT OF GEOGRAPHY

LECTURER
Vacant

DEPARTMENT OF HISTORY

SENIOR LECTURERS
J. S. Hagen. BA DipEd Syd., PhD A.N.U.
A. M. Healy, BA Syd., PhD A.N.U.

LECTURER
C. P. Kiernan, MA Cantab. and Melb.

DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

LECTURER
R. D. Francis, MA N.Z. and Melb., ABPsS

DEPARTMENT OF PSYCHOLOGY

LECTURER

SENIOR TUTOR
N. L. Adams, BSc N.S.W.

TUTOR
C. G. Cupit, BA Syd.

THE UNION

SECRETARY MANAGER
I. L. Dunn, LLB Lond.
Observatory Dome at Mount Keira
General Information

REQUIREMENTS FOR ADMISSION

INTRODUCTORY INFORMATION

A person who seeks to become a candidate for any degree of Bachelor of the University must first have qualified for matriculation and have satisfied the requirements for admission to the particular Faculty, course or subject chosen.

It should be noted that compliance with these conditions does not in itself entitle a candidate to enter upon a course. While it is the policy of the University to endeavour to admit all properly qualified applicants who have lodged applications by the appropriate closing date, it may be necessary at times to restrict the entry to one or more faculties because of lack of facilities.

A candidate who has satisfied the conditions for matriculation and for admission to a course of study shall be classed as a "matriculated student" of the University, after enrolment.

A person who has satisfactorily met the conditions for admission may be provided with a statement to that effect on the payment of the prescribed fee.

SECTION A

GENERAL MATRICULATION AND ADMISSION REQUIREMENTS

(for entry to the University in 1969 and until further notice)

1. A candidate may qualify for matriculation by attaining in recognised matriculation subjects at one New South Wales Higher School Certificate Examination or at one University of Sydney Matriculation Examination a level of performance determined by the Professorial Board from time to time.

2. The level of performance required to qualify for matriculation shall be

(a) passes in at least five recognised matriculation subjects, one of which shall be English and three of which shall be at Level 2 or higher; and

(b) the attainment of an aggregate of marks, as specified by the Professorial Board, in not more than five recognised matriculation subjects, such marks being co-ordinated in a manner approved by the Board.
3. The following subjects, and such other subjects as may be approved by the Professorial Board from time to time, shall be recognised matriculation subjects:

- English
- Mathematics
- Science
- Agriculture
- Modern History
- Ancient History
- Geography
- Economics
- Greek
- Latin
- French
- German
- Italian
- Bahasa Indonesia
- Spanish
- Russian
- Chinese
- Japanese
- Hebrew
- Dutch
- Art
- Music
- Industrial Arts

4. A candidate who has qualified to matriculate in accordance with the provisions of Clauses 1, 2 and 3 may be admitted to a particular Faculty, Course or Subject provided that:

(a) his qualification includes a pass at the level indicated in the subject or subjects specified in Schedule A as Faculty, Course or Subject Pre-Requisites;

or

(b) the requirements regarding these particular Faculty, Course or Subject Pre-Requisites, as specified in Schedule A, have been met at a separate Higher School Certificate or University of Sydney Matriculation Examination.

5. Notwithstanding any of the provisions of Clauses 1 to 4, the Professorial Board may grant matriculation status to any candidate at the Higher School Certificate or University of Sydney Matriculation Examination who has reached an acceptable standard and may admit him to any Faculty, Course or Subject.

NOTE

1. For the purposes of clause 2 (a), Mathematics and Science BOTH PASSED at First Level or Second Level Full Course shall together count as three subjects.

2. For the purposes of clause 2 (b), Mathematics and Science TAKEN either singly or together at First Level or Second Level Full Course shall each count as one and one half subjects.
### SCHEDULE A

<table>
<thead>
<tr>
<th>FACULTY OR COURSE</th>
<th>FACULTY OR COURSE PRE-REQUISITES</th>
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</table>
| Applied Science (excl. Wool Technology course) | (a) Science at Level 2S or higher  
AND  
(b) either Mathematics at Level 2F or higher  
OR  
Mathematics at Level 2S, provided that the candidate’s performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board. |
| Biological Sciences                      |                                                                                                                                                                                                                                |
| Engineering                              |                                                                                                                                                                                                                                |
| Industrial Arts Course                   |                                                                                                                                                                                                                                |
| Medicine                                 |                                                                                                                                                                                                                                |
| Military Studies (Engineering course and Applied Science course) |                                                                                                                                                                                                                                |
| Science                                  | (a) Science at Level 2S or higher  
AND  
(b) Mathematics at Level 2S or higher  
English at Level 2 or higher  
English at Level 3, provided that the candidate’s performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board. |
| Architecture                             |                                                                                                                                                                                                                                |
| Wool Technology Course (Faculty of Applied Science) | (a) Science at Level 2S or higher  
AND  
(b) Mathematics at Level 2S or higher  
English at Level 2 or higher  
English at Level 3, provided that the candidate’s performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board. |
| Sheep and Wool Technology (Education option) course |                                                                                                                                                                                                                                |
| Arts                                     |                                                                                                                                                                                                                                |
| Military Studies (Arts course)           |                                                                                                                                                                                                                                |
| Social Work Degree Course                |                                                                                                                                                                                                                                |
| Commerce                                 | (a) Mathematics at Level 2S or higher  
AND  
(b) either English at Level 2 or higher  
OR  
English at Level 3, provided that the candidate’s performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board. |
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>SUBJECT PRE-REQUISITES</th>
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| 1.011—Higher Physics I  
1.001—Physics I  
1.041—Physics IC | As for Faculty of Science |
| 2.011—Higher Chemistry I  
2.001—Chemistry I  
17.001—General and Human Biology  
25.001—Geology I | Science at Level 2S or higher |
| 10.011—Higher Mathematics I  
10.001—Mathematics I | Mathematics at Level 2F or higher  
Either Mathematics at Level 2F or higher  
OR  
Mathematics at Level 2S, provided that the candidate's performance in the subject and his general level of attainment are at standards acceptable to the Professorial Board. |
| 10.021—Mathematics IT | Mathematics at Level 2S or higher |
| 15.102—Economics II | As for Faculty of Commerce |
| 50.111—English I  
51.111—History I | English at Level 2 or higher |
| 56.111—French I | French at Level 2 or higher |
| 59.111—Russian I | Russian at Level 2 or higher |
| 64.111—German I | German at Level 2 or higher |
| 65.111—Spanish I | Spanish at Level 2 or higher |
| 59.001—Russian IZ  
64.001—German IZ  
65.001—Spanish IZ | A foreign language, other than that in which enrolment is sought, at Level 2 or higher |
SECTION B
SUPPLEMENTARY PROVISIONS FOR MATRICULATION

1. Notwithstanding the provisions of Section A above, candidates may be accepted as "matriculated students" of the University under the following conditions subject to the approval of the Professorial Board:

(a) Any person who holds a diploma from the New South Wales Department of Technical Education, or any other Technical College which may from time to time be recognised by the University, may be admitted to the University as a "matriculated student" with such status as the Board may determine, provided that, in the opinion of the Board, the applicant's qualifications are sufficient for matriculation to the Faculty nominated.

(b) The Board may admit as a "matriculated student" in any Faculty with such status as the Board may determine in the circumstances;
   (i) A graduate of any approved University.
   (ii) An applicant who presents a certificate from a University showing that he has a satisfactory record and is qualified for entrance to that University, provided that in the opinion of the Board there is an acceptable correspondence between the qualifying conditions relied upon by the applicant and conditions laid down for matriculation to the nominated Faculty of the University of New South Wales.

(c) (i) Any person who has completed the first year of the course at the Royal Military College of Australia and submits a certificate from the Commandant to that effect may be admitted as a "matriculated student" of the University.
   (ii) Any person who has completed a full course of at least three years' prescribed study at the Royal Military College of Australia and produces a certificate from the Commandant to that effect may be admitted as a "matriculated student" of the University with such status as the Board may determine.

(d) Any person who had completed satisfactorily the passing out examination of the Royal Australian Naval College and submits a certificate from the Commanding Officer may be admitted as a "matriculated student" of the University.
(e) (i) Any person who has completed the first year of the course at the Royal Australian Air Force College and submits a certificate from the Commandant to that effect, may be admitted as a "matriculated student" of the University.

(ii) Any person who has completed two years of the course at the Royal Australian Air Force College and submits a certificate from the Commandant to that effect, may be admitted as a "matriculated student" of the University with such status as the Board may determine.

(f) An applicant who presents a certificate from another University showing that he is qualified for entrance to that University and setting out the grounds of such qualification, provided that in the opinion of the Professorial Board, there is an acceptable correspondence between the qualifying conditions relied upon by the applicant and the conditions laid down for matriculation to the nominated Faculty of the University of New South Wales.

2. (a) The Professorial Board may in special cases, including cases concerning persons of other than Australian education, declare any person qualified to enter a Faculty as a "provisionally matriculated student" although he has not complied with the requirements set out above, and in so doing may prescribe the completion of certain requirements before confirming the person's standing as a "matriculated student". Students who satisfactorily complete these requirements will be permitted to count the courses so passed as qualifying for degree purposes.*

(b) Persons over the age of twenty-five years may be admitted to provisional matriculation status provided that:

(i) they have satisfactorily completed an approved course of systematic study extending over at least three years after passing the School Certificate Examination, or

(ii) they satisfy the Professorial Board that they have reached a standard of education sufficient to enable them profitably to pursue the first year of the proposed course.

* The Professorial Board has determined that normally confirmation of standing as a "matriculated student" will require the successful completion of not less than half the normal programme in the first year of enrolment.
(c) Any applicant for provisional status may be required to take such examination as the Professorial Board may prescribe before such status is granted.

3. The Professorial Board may at its discretion permit a person, who does not satisfy the requirements for admission, to attend lectures in a subject or subjects at the University, on payment of the prescribed fees provided that such person shall not necessarily have the privileges of "matriculated students" and shall not be eligible to proceed to a degree.

UNDERGRADUATE COURSES OF STUDY AND DEGREES AWARDED

The basic undergraduate programme of studies available at Wollongong constitutes a selection of those subjects of study most in demand to qualify for the degrees of Bachelor of Arts, Bachelor of Commerce, Bachelor of Science and Bachelor of Science (Technology). The full requirements for these degrees are set out in the University Calendar, and the following abridged information should be read in conjunction with the detailed particulars contained in the Calendar.

The subjects of study required for these degrees are being introduced progressively at Wollongong as the demand for them becomes evident, and as facilities and staff become available. At this stage, however, it is possible for students at Wollongong to take the first year of all undergraduate courses offered by the University in the Faculties of Applied Science, Arts, Biological Sciences, Commerce, Engineering (Mechanical and Industrial, Electrical, Civil), Medicine and Science. The accompanying tables show the full range of courses and the extent to which they can be taken at Wollongong.

Where the subjects of the advanced years for any degree offered by the University are not available at Wollongong, the student may transfer to Kensington with full credit, in most cases, for work completed at Wollongong.

In 1969, the subjects listed in the following pages will be available at Wollongong, subject to staff and facilities being available and to the number of enrolling students justifying the provision of such subjects.

**BACHELOR OF ARTS (B.A.)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.111W</td>
<td>English I</td>
<td>3</td>
</tr>
<tr>
<td>50.112W</td>
<td>English II</td>
<td>3</td>
</tr>
<tr>
<td>50.122</td>
<td>English II Honours</td>
<td></td>
</tr>
<tr>
<td>50.113</td>
<td>English III</td>
<td>3</td>
</tr>
</tbody>
</table>
The Bachelor of Arts course was introduced at Wollongong in 1964.
A programme of studies consistent with the rules set out in the University Calendar may be chosen from the above-listed subjects in 1969, but it should be noted that not all these will necessarily be offered. Subject to their availability, and class timetables permitting, subjects may be taken on a full-time or part-time basis. Details concerning the subjects available and the relevant timetables are available from the Senior Administrative Officer. Full-time students normally take four subjects in their first year, while part-time students normally limit their programme in any year to no more than two subjects. The minimum time for completion of requirements for the full-time degree is three years. Part-time students may qualify in five years. However, dependent on the programme selected and the capacity of the student, the duration of the course may vary.
# BACHELOR OF COMMERCE (B.COM.) — PASS DEGREE
## ACCOUNTANCY — FULL-TIME COURSE

<table>
<thead>
<tr>
<th>Year</th>
<th>Course</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lec.</td>
</tr>
<tr>
<td>Year I</td>
<td>14.111 Accounting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14.211 Commercial Law</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15.101 Economics I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10.041W Mathematic Statistics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Year II</td>
<td>14.112 Accounting II or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14.113 Accounting III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15.102 Economics II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Accounting Option I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Accounting Option II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Humanities I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Year III</td>
<td>14.113 Accounting III or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14.112 Accounting II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15.103 Economics III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Accounting Option III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Accounting Option IV</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Humanities II</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

# BACHELOR OF COMMERCE (B.COM.) — PASS DEGREE
## ECONOMICS — FULL-TIME COURSE

<table>
<thead>
<tr>
<th>Year</th>
<th>Course</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lec.</td>
</tr>
<tr>
<td>Year I</td>
<td>14.111 Accounting I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15.101 Economics I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10.001 Plus one of the following two subjects</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10.041W Mathematic Statistics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>12.001 Psychology I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14.211 Commercial Law</td>
<td>2</td>
</tr>
<tr>
<td>Year II</td>
<td>15.102 Economics II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>15.103 Economics III</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Economics Option I or General Option</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Humanities I</td>
<td>2</td>
</tr>
</tbody>
</table>
The general option requirements may be satisfied by enrolment in any subject available at Wollongong other than those offered by the Schools of Accountancy and Economics as electives, and provided that both Economic History I and History II (Honours) are not taken. This provision is, of course, subject to the meeting of pre-requisites (for example, English I is a pre-requisite for English II) and to the approval of the Head of the School concerned.

Full-time students take the full year’s programme as listed above, while part-time students select a programme which permits the completion of the year in two stages spread over two years.

The minimum time for completion of the degree by full-time study is three years, while part-time students may qualify for the degree in six years.

For details of the Humanities requirements, consult the end of this section.

**MECHANICAL AND CIVIL ENGINEERING—FULL-TIME COURSE**

Bachelor of Engineering

**FIRST YEAR**

(30 weeks’ day course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours per week for 3 terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.001W</td>
<td>Physics I</td>
<td>3 Lec., 3 Lab./Tut.</td>
</tr>
<tr>
<td>5.001W</td>
<td>Engineering I</td>
<td>4 Lec., 2 Lab./Tut.</td>
</tr>
<tr>
<td>10.001</td>
<td>Mathematics I</td>
<td>4 Lec., 2 Lab./Tut.</td>
</tr>
<tr>
<td>2.001</td>
<td>Chemistry I</td>
<td>3 Lec., 3 Lab./Tut.</td>
</tr>
<tr>
<td>69.001W</td>
<td>Materials</td>
<td></td>
</tr>
</tbody>
</table>

**SECOND YEAR**

(30 weeks’ day course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours per week for 3 terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.111W</td>
<td>Design I</td>
<td>1 Lec., 2 Lab./Tut.</td>
</tr>
<tr>
<td>5.311W</td>
<td>Applied Mechanics I</td>
<td>1½ Lec., ½ Lab./Tut.</td>
</tr>
<tr>
<td>5.611W</td>
<td>Engineering II</td>
<td>2½ Lec., 3 Lab./Tut.</td>
</tr>
<tr>
<td>6.801</td>
<td>Electrical Engineering</td>
<td>1 Lec., 2 Lab./Tut.</td>
</tr>
<tr>
<td>69.002W</td>
<td>Strength of Materials</td>
<td>3 Lec., 1½ Lab./Tut.</td>
</tr>
<tr>
<td>10.421W</td>
<td>Mathematics</td>
<td>4 Lec., 1 Lab./Tut.</td>
</tr>
<tr>
<td>26.501</td>
<td>English</td>
<td>1 Lec., ½ Lab./Tut.</td>
</tr>
</tbody>
</table>

**THIRD AND FOURTH YEARS**

The third and fourth year courses are identical with those offered by the Schools of Mechanical and Civil Engineering at Kensington.
# MECHANICAL AND CIVIL ENGINEERING—
## PART-TIME COURSE
### Bachelor of Science (Technology)

#### FIRST STAGE
(30 weeks’ part-time Course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lec.</th>
<th>Lab./Tut.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.001W</td>
<td>Physics 1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>10.001</td>
<td>Mathematics 1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

#### SECOND STAGE
(30 weeks’ part-time Course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lec.</th>
<th>Lab./Tut.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.001W</td>
<td>Engineering I</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>69.001W</td>
<td>Materials</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2.001</td>
<td>Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

#### THIRD STAGE
(30 weeks’ part-time Course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lec.</th>
<th>Lab./Tut.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.311W</td>
<td>Applied Mechanics I</td>
<td>1½</td>
<td>¼</td>
</tr>
<tr>
<td>69.002W</td>
<td>Strength of Materials</td>
<td>3</td>
<td>1⅓</td>
</tr>
<tr>
<td>10.421W</td>
<td>Mathematics</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>26.501</td>
<td>English</td>
<td>1</td>
<td>¼</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9½</td>
<td>3½</td>
</tr>
</tbody>
</table>

#### FOURTH STAGE
(30 weeks’ part-time Course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lec.</th>
<th>Lab./Tut.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.111W</td>
<td>Design I</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5.611W</td>
<td>Engineering II</td>
<td>2½</td>
<td>3</td>
</tr>
<tr>
<td>6.801</td>
<td>Electrical Engineering</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4½</td>
<td>7</td>
</tr>
</tbody>
</table>

The fifth and sixth stage of the Civil Engineering courses are identical with those offered by the School of Civil Engineering at Kensington.
MECHANICAL ENGINEERING—PART-TIME COURSE

FIFTH STAGE
(30 weeks' part-time Course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.101/2W</td>
<td>Mechanical Engineering Design, Part II</td>
<td>0 2</td>
</tr>
<tr>
<td>5.302W</td>
<td>Theory of Machines</td>
<td>1 1</td>
</tr>
<tr>
<td>5.303W</td>
<td>Mechanical Vibrations</td>
<td>0 1</td>
</tr>
<tr>
<td>5.402W</td>
<td>Mechanics of Solids</td>
<td>1 1</td>
</tr>
<tr>
<td>6.801</td>
<td>Electrical Engineering</td>
<td>0 1</td>
</tr>
<tr>
<td>5.023W</td>
<td>Seminar</td>
<td>5 7</td>
</tr>
</tbody>
</table>

SIXTH STAGE
(30 weeks' part-time course)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.102W</td>
<td>Mechanical Engineering Design</td>
<td>1 2</td>
</tr>
<tr>
<td>5.321W</td>
<td>Automatic Control Engineering</td>
<td>1 0</td>
</tr>
<tr>
<td>5.502W</td>
<td>Fluid Mechanics</td>
<td>1 1</td>
</tr>
<tr>
<td>5.702W</td>
<td>Thermodynamics</td>
<td>1 1</td>
</tr>
<tr>
<td>6.802</td>
<td>Electrical Engineering</td>
<td>5 6</td>
</tr>
</tbody>
</table>

SCIENCE COURSE

Students should note that there has been a change in the presentation of subjects within the Science course. In many cases whole-subjects have been replaced by units, and the minimum number of units now required for graduation will be 23, in place of the previous nine Science subjects. For further details students should consult the combined Faculty of Biological Sciences and Faculty of Science handbook and the Head of the appropriate School.

BACHELOR OF SCIENCE (B.Sc.)

Science Subjects

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.001AW</td>
<td>Mechanics</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>1.001BW</td>
<td>Electricity and Magnetism</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>1.011</td>
<td>Higher Physics I</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>2.001</td>
<td>Chemistry I</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>2.011</td>
<td>Higher Chemistry I</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>5.001W</td>
<td>Engineering I</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>10.001</td>
<td>Mathematics I</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>10.011W</td>
<td>Higher Mathematics I</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>12.001</td>
<td>Psychology I</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>17.001</td>
<td>General and Human Biology</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>25.001</td>
<td>Geology I</td>
<td>180</td>
</tr>
</tbody>
</table>
A selection of subjects qualifying for the degree of Bachelor of Science by way of the Science Course (as distinct from the specific courses such as, for example, those in Applied Chemistry, Metallurgy, etc., which also lead to this degree) have been available at Wollongong for some time. Currently, however, the full requirements of the Science Course may be taken at Wollongong if the student elects to major in Chemistry, Physics or Mathematics (Pass or Honours), or in Geology (Pass).

**PRE-REQUISITES AND CO-REQUISITES**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>No. of Units</th>
<th>Prerequisites</th>
<th>Corequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.001AW</td>
<td>Mechanics</td>
<td>1</td>
<td>10.001</td>
<td></td>
</tr>
<tr>
<td>1.001BW</td>
<td>Electricity and Magnetism</td>
<td>1</td>
<td>10.001</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>No. of Units</td>
<td>Prerequisites</td>
<td>Corequisites</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------</td>
<td>--------------</td>
<td>----------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>1.112AW</td>
<td>Electromagnetism, Optics Relativity</td>
<td>1</td>
<td>1.001W or 1.011</td>
<td></td>
</tr>
<tr>
<td>1.112BW</td>
<td>Atomic Physics, Nuclear Physics, Wave Mechanics, Solid State</td>
<td>1</td>
<td>1.001W or 1.011</td>
<td>any 3 units from 10.111W and 10.211W</td>
</tr>
<tr>
<td>1.112CW</td>
<td>Thermodynamics, Mechanics</td>
<td>1</td>
<td>1.001W or 1.011</td>
<td></td>
</tr>
<tr>
<td>1.113AW</td>
<td>Electromagnetic Theory, Nuclear Physics</td>
<td>1</td>
<td>1.112</td>
<td></td>
</tr>
<tr>
<td>1.113BW</td>
<td>Thermodynamics, Solid State Statistical Mechanics</td>
<td>1</td>
<td>1.112</td>
<td></td>
</tr>
<tr>
<td>1.113CW</td>
<td>Plasma Physics, Spectroscopy</td>
<td>1</td>
<td>1.112</td>
<td></td>
</tr>
<tr>
<td>1.113DW</td>
<td>Classical Mechanics, Quantum Mechanics</td>
<td>1</td>
<td>1.112</td>
<td></td>
</tr>
<tr>
<td>2.302W</td>
<td>Physical Chemistry</td>
<td>1</td>
<td>2.001 or 2.011</td>
<td>10.001 or 10.011</td>
</tr>
<tr>
<td>2.402W</td>
<td>Inorganic Chemistry</td>
<td>1</td>
<td>2.001 or 2.011</td>
<td>10.001 or 10.011</td>
</tr>
<tr>
<td>2.602W</td>
<td>Organic Chemistry</td>
<td>1</td>
<td>2.001 or 2.011</td>
<td>10.001 or 10.011</td>
</tr>
<tr>
<td>2.702W</td>
<td>Applied Chemistry</td>
<td>1</td>
<td>2.001 or 2.011</td>
<td>10.001 or 10.011</td>
</tr>
<tr>
<td>2.303W</td>
<td>Physical Chemistry A</td>
<td>1</td>
<td>2.302W</td>
<td>2.402W and 2.602W</td>
</tr>
<tr>
<td>2.353W</td>
<td>Physical Chemistry B</td>
<td>1</td>
<td>2.302W</td>
<td>2.402W and 2.602W</td>
</tr>
<tr>
<td>2.373W</td>
<td>Physical Chemistry C</td>
<td>1</td>
<td>2.302W, 2.402W and 2.602W</td>
<td>2.303W or 2.353W</td>
</tr>
<tr>
<td>2.403W</td>
<td>Inorganic Chemistry</td>
<td>1</td>
<td>2.402W</td>
<td>2.302W and 2.602W</td>
</tr>
<tr>
<td>2.503W</td>
<td>Chemical Analysis</td>
<td>1</td>
<td>2.402W</td>
<td>2.302W and 2.602W</td>
</tr>
<tr>
<td>2.603W</td>
<td>Organic Chemistry A</td>
<td>1</td>
<td>2.602W</td>
<td>2.302W and 2.402W</td>
</tr>
<tr>
<td>2.653W</td>
<td>Organic Chemistry B</td>
<td>1</td>
<td>2.602W</td>
<td>2.403W or 2.503W</td>
</tr>
<tr>
<td>2.773W</td>
<td>Techniques in Chemistry</td>
<td>1</td>
<td>2.302W, 2.402W and 2.602W</td>
<td>2.353W</td>
</tr>
<tr>
<td>10.111AW</td>
<td>Calculus and Differential Equations</td>
<td>1</td>
<td>10.001</td>
<td></td>
</tr>
<tr>
<td>10.111BW</td>
<td>Vector and Matrix Algebra</td>
<td>4</td>
<td>10.001</td>
<td></td>
</tr>
<tr>
<td>10.111CW</td>
<td>Analytic and Projective Geometry</td>
<td>3</td>
<td>10.001</td>
<td></td>
</tr>
</tbody>
</table>
A programme of studies, consistent with the rules set out in the Calendar may be chosen in 1969 from the above-listed subjects, and may be taken on a full or part-time basis subject to the class timetables. Details of time-tables may be obtained from the Senior Administrative Officer at the College.

DEPARTMENT OF CHEMISTRY

Pass and Honours Course in Chemistry within the Science Course

Year I (Stages I and II): 8 units

<table>
<thead>
<tr>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.001W Physics I (Wollongong) or 1.011 Physics I Higher</td>
</tr>
<tr>
<td>2.001 Chemistry I or 2.011 Chemistry I Higher</td>
</tr>
<tr>
<td>10.001 Mathematics I or 10.011 Mathematics I Higher</td>
</tr>
</tbody>
</table>

and one of 5.001W Engineering I, 12.011 Psychology I, 17.001 General and Human Biology, or 25.001 Geology I.

Each first year science subject counts as two units.

Year II (Stages III and IV): 8 units and General Studies Subjects

<table>
<thead>
<tr>
<th>Hours for 30 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
</tr>
<tr>
<td>2.302W Physical Chemistry</td>
</tr>
<tr>
<td>2.402W Inorganic Chemistry</td>
</tr>
<tr>
<td>2.602W Organic Chemistry</td>
</tr>
<tr>
<td>2.702W Applied Chemistry</td>
</tr>
</tbody>
</table>

and four other second level science units (two of these four units may be substituted by one first year science subject not already taken).
### Year III (Stages V and VI): 8 units and General Studies Subjects

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>L</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.303W</td>
<td>Physical Chemistry A</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>2.353W</td>
<td>Physical Chemistry B</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>2.373W</td>
<td>Physical Chemistry C</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>2.403W</td>
<td>Inorganic Chemistry</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>2.503W</td>
<td>Chemical Analysis</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>2.603W</td>
<td>Organic Chemistry A</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>2.653W</td>
<td>Organic Chemistry B</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>2.773W</td>
<td>Techniques in Chemistry</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Students majoring in Chemistry must pass in four third level chemistry units (the Department recommends passing in six, preferably eight, units). Not more than four of the eight third level science units may be substituted by second level science units. Students wishing to gain admittance to the Honours course should complete eight third level science units.

### Year IV Honours

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>L</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.114W</td>
<td></td>
<td>40</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2.124W</td>
<td></td>
<td>40</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2.104W</td>
<td></td>
<td></td>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>

and General Studies Subjects.

All chemistry units except 2.104W in years II, III and IV are offered either during the first or second half of the year.

### BACHELOR OF SCIENCE (TECHNOLOGY) (B.Sc. (Tech.))

The degree of Bachelor of Science (Technology) is the degree awarded on completion of the part-time courses in the Faculties of Applied Science and Engineering. All the courses leading to this degree are offered to at least the level of first year, and, in addition, the full range of subjects in Mechanical Engineering, Electrical Engineering, Metallurgy and Mining Engineering are available at Wollongong so that these courses may be completed entirely at this centre.

While the normal method of completing these courses is through part-time study over a period of six years, it is possible for an accelerated programme to be arranged provided the circumstances of the student’s employment require it, and the proposed time-table arrangements permit it.

### GENERAL STUDIES

It is a requirement of all undergraduate courses, except those for the Bachelor of Arts degree, that the programme of study includes subjects of a general nature as well as those in which a student proposes to specialise. Details of the General Studies Programme to be offered in 1969 will be available shortly before the enrolment period.
Descriptions of Subjects

Most courses taught at Wollongong follow the syllabus of the University of New South Wales at Kensington, details of which will be found in the University Calendar.

The following are particulars of courses offered only at Wollongong:

**PHYSICS**

1.001W Physics I
TEXTBOOKS

1.112W Physics II
TEXTBOOKS

1.113 Physics III
TEXTBOOKS

**CHEMISTRY**

2.302W Physical Chemistry
Introduction to physico-chemical properties of systems. Elementary quantum theory. Molecular energy, chemical thermodynamics (first, second and third laws), application of thermodynamics to chemical systems, nature of electrolyte solutions and electrode processes.

TEXTBOOK

REFERENCE BOOK
2.303W Physical Chemistry A

**Kinetics:** Transition state theory, complex reactions—homogeneous and heterogeneous catalysis. **Exchange Processes:** Catalytic exchange reactions—classical theories—π complex mechanism—kinetics of exchange reactions. **Reaction Mechanism:** A mechanistic study of several reactions, involving both organic and inorganic molecules.

**TEXTBOOK**

**REFERENCE BOOKS**

2.353W Physical Chemistry B

**Quantum Chemistry:** Applications of quantum mechanics to chemical systems and problems to demonstrate the methods used in the description and elucidation of atomic and molecular systems. Treatment of systems such as H atom, H⁺ ion, H₂ with extension to polyatomic molecules. Computational and other approximate methods for conjugated and related systems.

**Molecular Spectroscopy:** Description of energy states of molecules with reference to vibration, rotation and electronic energies. Selection rules for absorption and emission. Excited states. Life-times and shapes. Electric and magnetic phenomena—Stark Effect—NMR—ESR—ORD. Application of spectra to elucidation of chemical structure.

**REFERENCE BOOKS**

2.373W Physical Chemistry C

**Thermodynamics** of non-ideal system—fugacity and chemical potential—thermodynamics of solution—partial molar quantities, activities and activity coefficients—Debye Hückel Theory. **Electrochemistry:** Theories of electrolyte solutions—electrode processes—ionic equilibria. **Surface Chemistry:** Adsorption and molecular films—colloids—emulsions.

**REFERENCE BOOKS**
2.402W Inorganic Chemistry
Systematic chemistry of the elements (metals, non-metals and transition elements). Introduction to co-ordination chemistry. Theories of Blomstrand-Jorgensen and Werner. The co-ordinate bond, stereoisomerism, high and low spin complexes, paramagnetism.

TEXTBOOKS

REFERENCE BOOKS

2.403W Inorganic Chemistry

TEXTBOOK

REFERENCE BOOKS

2.503W Chemical Analysis
Techniques of Analytical Chemistry—precipitation, organic reagents, solvent extraction, electroanalysis, potentiometry, ion exchange, complex formation. Sampling and methods of solution—role of the solvent. General principles in the quantitative analysis of (a) elements and alloys; (b) functional groups; (c) organic materials.

TEXTBOOKS

REFERENCE BOOKS
2.602W Organic Chemistry

TEXTBOOKS

REFERENCE BOOKS

2.603W Organic Chemistry A

TEXTBOOKS

REFERENCE BOOKS

2.653W Organic Chemistry B

TEXTBOOKS

REFERENCE BOOKS
2.702W Applied Chemistry

**Applied Spectroscopy:** Applications of infra-red and electronic spectroscopy in qualitative and quantitative analysis—Emission spectroscopy in analytical chemistry—Spectroscopic instrumentation. **Methods of Analysis in Chemistry:** Gravimetric, volumetric—acid-base, redox, volumetric precipitation, organic analysis. Statistical treatment of data. **Radiochemistry:** Principles—measuring and handling techniques—isotope dilution—activation analysis.

**TEXTBOOKS**

**REFERENCE BOOKS**

2.773W Techniques in Chemistry

A course in important techniques used in chemistry for structure determination and other applications: Mossbauer Effect; X-ray diffraction; mass spectrometry; chromatography.

**REFERENCE BOOKS**

4.011W Metallurgy I

(a) General Introduction to Metallurgy.

(b) Physical Metallurgy: The crystalline structure and physical properties of solids; structure sensitive and structure insensitive properties; free electron theory; phase equilibrium in alloy systems; thermodynamic and physical aspects of binary systems; mechanism of phase transformations; departures from equilibrium and principles of heat treatment; generation of microstructure; metallography of iron-carbon alloys.

(c) Chemical and Extraction Metallurgy: Principles underlying the unit processes by which metals are extracted from ores and raw materials; the extraction metallurgy of iron and steel, copper, aluminium, lead and zinc, together with the less common metals; an introduction to the principles of fluid flow, metallurgical stoichiometry, energy and mass balances, refractories, fuels and combustion.

(d) Mechanical Metallurgy: Principles, aims and methods of mechanical testing; the mechanical behaviour of solids—elastic and inelastic behaviour; the effects of stress state, temperature and strain rate; creep, fatigue and brittle fracture; metal shaping processes.

**TEXTBOOKS**
Cottrell, A. H. *An Introduction to Metallurgy.* Arnold.
10.121W Pure Mathematics II (Wollongong) (Higher)
Calculus, differential equations, algebra, geometry, theory of functions for real variable, topology.

TEXTBOOKS
As for 10.111W and

10.112AW Integral Transforms and Special Functions
Laplace, Fourier, Mellin and Hankel transforms, special functions of mathematical physics.

10.112BW Abstract Algebra
Groups, rings, fields, ideals, algebraic number fields, Galois theory.

10.112CW Differential Geometry
Serret-Frenet formulae, quadratic differential forms, geodesics.

10.112DW Theory of Functions
Metric spaces, function spaces, Lebesgue integration, analytic functions and continuation, multiple-valued functions.

TEXTBOOKS

REFERENCE BOOKS
Rainville, E. D. Special Functions. Macmillan.

10.122W Pure Mathematics III (Wollongong) (Higher)
Integral transforms, special functions, algebra, geometry, theory of functions, topology.

TEXTBOOKS
As for 10.112W

10.211AW Dynamics and Vibrations
Motion of a particle and of a rigid body; normal modes, vibrations of continuous systems.

10.211BW Probability and Statistics
Probability, discrete and continuous distributions, expectations, sampling distributions, estimation, tests of hypotheses.

10.211CW Numerical Analysis
Numerical processes applied to functions, equations, differential equations, integration and matrices; direct methods and least squares.

10.211DW and 10211FW Computing A and B
Laboratory project work available in half units and related to the lecture courses.

TEXTBOOKS
Freund, J. E. Mathematical Statistics. Prentice-Hall.
REFERENCE BOOKS
Froberg, C. E. *Introduction to Numerical Analysis*. Addison-Wesley.

10.221W Applied Mathematics II (Wollongong) (Higher)
Dynamics, theory of vibrations, probability and statistics, numerical analysis, computing, nuclear reactor theory.

TEXTBOOKS
As for 10.211W

10.212AW Dynamics of Continuous Media
Infinitesimal elastic strain theory, Euler's equation, two-dimensional motion, compressible flow, water waves including surface, long, capillary and finite emplitude waves, dispersion, perturbation theory, interaction of waves, spectral analysis.

10.212BW Potential Theory and Methods
Laplace's and Poisson's equation, cartesian tensors, calculus of variations, optimisation of numerical process in solving differential equations, harmonic and data analysis.

10.212CW Stochastic Processes
Probability measures, random variables, branching processes, renewal processes, markov chains, test of significance, sequential analysis.

10.212DW Operations Research
Linear, non-linear and dynamic programming, queuing theory, theory of games, simulation.

TEXTBOOKS
Bullen, K. E. *Introduction to Seismology*. C.U.P.

REFERENCE BOOKS
Hildebrand, F. B. *Methods of Applied Mathematics*. Prentice-Hall.

10.222W Applied Mathematics III (Wollongong) (Higher)
Dynamics of continuous media, potential theory, stochastic processes, operations research, computing, nuclear reactor theory, meteorology, numerical analysis.

TEXTBOOKS
As for 10.212W

10.411 Mathematics II (Wollongong)
Calculus, differential equations, algebra, probability and statistics, numerical analysis, computing.

10.412W Mathematics III (Wollongong)
Integral transforms, special functions, stochastic processes, operations research, computing, and an elective.

TEXTBOOKS
10.411 and 10.412W
Students will require a selection of the second and third years' books listed above, and should consult their lecturers before purchasing their textbooks.

10.413W Mathematics IV Honours

TEXTBOOK
GEOGRAPHY

27.041W Geography I
The lectures will be divided approximately as follows: Physical Geography (35 lectures), Human Geography (40 lectures) and specific regional illustrations of the above Systematic Strand (15 lectures). The overriding theme of this course is the application of general systems theory to geographical phenomena.
The practical classes will deal with use of topographic maps, introduction to air photo interpretations and graphical illustration of geographical data.
Tutorial organisation and topics will be finalised at the commencement of Term I.

TEXTBOOKS
In addition, all students should possess a modern atlas, such as:

REFERENCE BOOKS

ENGLISH

50.111W English I
A. Language and earlier Literature
(i) the spoken language and phonetics; (ii) the history of the English language; and (iii) selected works by Chaucer and Shakespeare.

B. Twentieth-Century Literature
(i) poetry; (ii) fiction; and (iii) drama.

RECOMMENDED READING
A. Language and Earlier Literature
(i) Gimson, A. C. An Introduction to the Pronunciation of English. Arnold.
(ii) Baugh, A. C. A History of the English Language. 2nd ed. Routledge.
(iii) Chaucer. The Nun's Priest's Tale. Sisam, ed. O.U.P.
Shakespeare. Much Ado About Nothing.
B. Twentieth-Century Literature

(i) Poetry


(ii) Fiction
Conrad. *Lord Jim*; *Heart of Darkness*.
Forster. *Howards End*; *A Passage to India*.
Joyce. *A Portrait of the Artist as a Young Man*.
Faulkner. *The Sound and the Fury*.
Bellow. *Henderson, the Rain King*.

(iii) Drama
Synge. Plays to be selected from *Plays, Poems and Prose*. Everyman.

Bellow. *Henderson, the Rain King*.

50.112W English II
A. Nineteenth-Century Literature
B. Selected Comedies and History Plays by Shakespeare

A. Nineteenth-Century Literature

Prose
RECOMMENDED READING
Jane Austen. *Emma*; *Mansfield Park*; *Persuasion*.
Dickens. *Oliver Twist*; *Martin Chuzzlewit*; *Our Mutual Friend*.
Thackeray. *Vanity Fair*; *Henry Esmond*.
Melville. *Moby Dick*; *Billy Budd* and selected short stories.
Butler. *The Way of All Flesh*.

Poetry

No text books will be prescribed. Students purchasing their own copies of the poetry are advised to buy the edition in the Oxford Standard Authors, where available, or for Wordsworth, *Selected Poetry*, Mark Van Doren, ed. (Modern Library College Edition); for Coleridge, *Selected Poetry and Prose*, Stauffer, ed. (Modern Library C.E.); for Keats, *Complete Poetry and Selected Prose*, Briggs, ed. (Modern Library C.E.), and for Tennyson, *Selected Poetry*, Bush, ed. (Modern Library C.E.).

B. Shakespeare

*Troilus and Cressida*; *The Tempest*.
*Richard III*; *Henry IV* (both parts); *Henry V*.

Students may use any good complete edition, e.g. Alexander (Collins) or Sisson (Odhams), or separate volumes of, e.g., The New Arden edition (Methuen), or the New Shakespeare (C.U.P.).

50.122 English II Honours
1. The pass course, 50.112W.
2. An Introduction to Old and Middle English Language and Literature.
3. A further study of Twentieth-Century Literature in English.
Materials in Engineering Design: Standard specifications and acceptance tests; measurement of fatigue and impact strengths and hardness; notch sensitivity; application of criteria of failure.

5.105GW Optimum Design for Mechanical Engineers
Introduction, discussion of methods of optimisation; mathematical functions in engineering; principles of optimum design: normal, redundant and incompatible specifications; problems with more than one primary design equation; optimum design of axially loaded members (with static and variable load); optimum design of torsion shaft for minimum weight, minimum cost, maximum cost, maximum energy absorption, maximum torque felt by machine frame, maximum power transmission; optimum design of shaft with combined loading; optimum design of gears for maximum torque transmission capability, for maximum power transmission capability for minimum size; some typical examples of optimum design; optimisation by linear programming—simplex method.

5.306GW Advanced Dynamics
Kinematics and dynamics of particles and rigid bodies in three-dimensional motion: Fixed and moving reference frames; Newtonian dynamics; inertia tensor; Euler’s equations of motion; general motion of gyroscopes and rigid bodies in space.
Calculus of variations: Functions and functionals; stationary values of integrals; Euler-Lagrange equation; constraints and Lagrange multipliers; fixed and variable end points; problems of Lagrange, Mayer and Bolza.
Variational dynamics: Performance optimisation; generalised co-ordinates; Lagrange equation; Hamilton’s principle; impulsive motion: oscillatory motion.

5.376GW Advanced Mechanics of Solids I
Stresses in normally loaded flat plates and shells: Bending and deflection of long rectangular plates; bending and deflection of circular plates; bending stresses in thin-walled vessels; thermal stresses in thin-walled vessels.
Buckling: Lateral buckling of prismatic bars; energy method of calculating critical compressive loads; buckling of bars of variable cross section; effect of shearing force on the critical load; inelastic buckling of straight columns; buckling of circular rings and tubes under external pressure; buckling of beams without lateral supports; buckling of shafts by torsion; twist-bend buckling, twist buckling of columns; buckling of rectangular plates.
Stresses and deformations of rotating discs: Uniform and varying thickness; uniform stress; sum and difference method; temperature gradients.
Effect of small inelastic strains on load-carrying capacity: Notched bar in tension; residual stresses; beam of rectangular cross-section; torsion of prismatical bars; ultimate load analysis—simple cases; thick cylinders.

5.377GW Advanced Mechanics of Solids II
Plasticity and metal forming: Theories of plasticity; plane strain problems in cartesian and polar co-ordinates; axially-symmetrical problems in cylindrical and spherical co-ordinates; effect of temperature strain rate and external friction on plastic deformation; applications to certain metal forming problems.
Elastic bodies in contact: Point and line contact; contact stresses; deflection of bodies in contact; effect of friction on contact stresses.
Fluctuating stresses: Endurance test; fatigue; effect of stress concentration on fatigue; mean stress, variable stress; fatigue under combined loading; theories of fatigue failure; factor of safety; corrosion fatigue.
Mechanical properties of materials at high temperature: Introduction to the mechanics of creep; deformation by creep; steady creep under general state of stress; creep under alternating stress; effect at temperature variations; stress relaxation due to creep; creep recovery.
Mechanical properties of materials at low temperature: Brittle fracture; propagation of brittle cracks; ductile-brittle transition; fracture toughness; notch ductility.
5.385GW Theory of Elasticity
Basic concepts: Notation; components of stress and strain; plane stress and plane
strain: equations of equilibrium and compatibility; Airy's stress function; applica­
tions to the solution of two-dimensional problems in rectangular co-ordinates;
polar co-ordinates; stress distributions symmetrical about an axis; application to
the solution of various problems.
Torsion: Prismatical bars, St. Venant's theory; membrane and other analogies;
torsion of rectangular bars, angles, channels, etc.; hollow shafts and thin tubes.
Stress concentration: Mathematical and experimental methods; stress concentration
in tension and compression members; stress concentration in torsion; circular
shafts of variable diameter; stress concentration in bending; investigation of stress
concentration with models; photoelastic method of stress measurements.
Thermal stresses: One-dimensional temperature distributions; rectangular plate,
turbine blade; two-dimensional temperature distributions; circular disc, turbine
disc; allowable stresses at elevated temperatures; creep, fatigue, thermal shock.
Stress waves: Longitudinal waves in prismatic bars; longitudinal impact of bars.

5.453GW Computational Methods in Mechanical Engineering I
Programming languages, including Fortran and automatic differential equation
solvers; solution of single non-linear equations; iteration; extension to simulta­
eous equations; systems of linear equations; direct, matrix and iterative
methods; relaxation; empirical analysis; least squares, differential correction;
introduction to linear programming; ordinary differential equations: series and
stepwise methods; partial differential equations: solution by finite differences;
iterative methods in boundary value and initial value problems.

5.454GW Computational Methods in Mechanical Engineering II
Deals with the solution of engineering problems employing the methods of systems
analysis. Both lumped parameter and distributed systems are discussed. The
following topics are treated:—
Problem formulation, classical time domain methods, frequency domain analysis,
Fourier, Laplace and Z transforms, matrix methods and introduction to state­
space analysis, phase-plane analysis applied to non-linear systems. analogue
computation.

5.515GW Gas Dynamics and Compressible Fluid Flow
Thermodynamics, conservation equations, kinematics, vorticity; acoustic waves;
mach number; isentropic and isenergetic flow; nozzle; wind tunnel; diffusers.
Method of characteristics; influence of friction and heat transfer; combustion in a
duct; rocket motor; general one-dimensional flows; potential flow small perturba­
tion theory; linearised theory of steady plane flow for wings and bodies; shock
waves; shock polar; conical shocks; moving shocks: Prandtl-Meyer flow; Busemann
series expansion method.

5.716GW Advanced Heat Transfer I
Fluid Dynamics: Mass continuity equations; Navier-Stokes equations, their general
properties and exact solutions; boundary layer theory; laminar, transition and
turbulent flow; equations of motion; exact solutions of boundary layer parameters
for laminar flow; turbulence; Reynolds stresses; eddy diffusivity theory; mixing
length theories; Prandtl's momentum transfer theory; Taylor's vorticity transfer
theory; Von Karman's similarity hypothesis; boundary layer parameters for
turbulent flow; velocity defect law; universal velocity distribution; application to
turbulent flow in circular pipes; velocity distributions and resistance formulae for
hydraulically smooth and rough pipes; integral method for approximate boundary
layer analysis; Von Karman's momentum equation; application to laminar and
turbulent boundary layers; boundary layers with pressure gradient; separate and
vortex formation; boundary layer control; drag and pressure distribution relation­
ships for bluff bodies.
Heat Transfer by Convection

A. General: Introduction; heat, mass and momentum transport; methods of evaluation of the convective heat transfer coefficient; dimensional analysis; physical interpretation of parameters; correlation of experimental data; theory of similarity in heat transfer; energy equation; thermal boundary layers in laminar flow; general properties; exact solutions of temperature distributions; integral method as an approximate analyses of thermal boundary layers in laminar flow; heat and momentum transfer in turbulent flow; the Reynolds analogy; the Taylor-Prandtl analogy; the Von Karman analogy; the turbulent Prandtl number, the Stanton number.

B. Free Convection: Similarity parameters; velocity and temperature fields; correlation of data for vertical, horizontal and sloping surfaces; evaluations of heat flow for geometric shapes of practical interest; laminar and turbulent flow cases; convection caused by centrifugal forces; convection from rotating bodies.

C. Forced Convection: Velocity and temperature fields in closed conduits; effect of similarity parameters on heat transfer; heat transfer coefficients for laminar and turbulent flow; semi-empirical equations and working formulae; flow over exterior surfaces; separated flow; application to flow over a bank of tubes; heat exchanger design and selection; flow arrangements and effectiveness; fouling factors; heat transfer in high-speed flow, in rarefied gases and in free molecule flow.

D. Heat Transfer with change of Phase: Condensation; Nusselt's liquid-film theory; turbulent film condensation; super-heated vapours; multicomponent vapours; non-condensable gases; drop-wise condensation; experimental results and working formulae; condensation in tubes: evaporation; surface evaporation; nucleate boiling of a sub-cooled liquid; nucleate pool boiling; film boiling; burnout; experimental results and working formulae; boiling in tubes.

5.717GW Advanced Heat Transfer II

Conduction: Unidimensional heat flow; analysis of extended surfaces; two and three-dimensional conduction; unsteady conduction in one or more dimensions; analytical, numerical and analogical methods of solution; transient systems; initial value and boundary value problems; non-homogeneous bodies; anisotropic bodies; variable material properties.

Radiation: Thermal radiation properties of materials, black bodies—characteristics of real solids, liquid and gases; radiation exchange between infinite surfaces and between finite surfaces; shape factor for various configurations; radiation shields; re-radiating surfaces and electrical analogies; radiation behaviour of gases and vapours; pyrometry; solar radiation.

5.725GW Statistical Thermodynamics

History and review of classical thermodynamics; kinetic theory of an ideal monatomic gas; equations of state; statistical mechanics for systems of independent particles; concept of entropy; Maxwell, Boltzmann, Bose-Einstein and Fermi-Dirac statistics; partition function; velocity and energy distributions; classical-statistical comparisons; quantum mechanics; Schrödinger wave equation and applications; electronic states; the photon gas; the Einstein solid; diatomic and polyatomic gases; low temperature effects; statistical mechanics for systems of dependent particles; behaviour of real gases and liquids; irreversible processes; thermoelectric and thermochemical phenomena.

5.502W Fluid Mechanics

Dimensional analysis; theory of models; boundary layer theory on flat plates; resistance of bodies; one-dimensional gas dynamics; isentropic, adiabatic flows; flow of gases and vapours in nozzles; theory of centrifugal pumps; axial flow pumps and turbines: similitude laws; cavitation.

TEXTBOOK
5.611W Fluid Mechanics/Thermodynamics I
Dimensional systems, units, dimensional analysis, properties of substances: statics of fluids; one-dimensional flow; mass, energy and momentum equations; laminar and turbulent motion; flow in pipes; elementary boundary layer theory; drag; fluid measurements; angular momentum equations; turbomachines; concepts and conservation principles of thermodynamics first and second laws of thermodynamics; properties of ideal gases, liquids and vapours; non-flow and flow processes; ideal cycles; factors limiting performance of real cycles.

TEXTBOOKS

5.702W Thermodynamics
Heat pump and refrigeration cycles; vapour compression, absorption and compressed air systems; properties of non-reactive mixtures of gases and vapours; Gibbs-Dalton law; psychrometry; hygrometric chart; thermodynamic charts; reciprocating engines and compressors, criteria of performance; axial and radial flow, turbines and compressors; gas turbine cycles with heat exchange, intercooling and reheat; steady heat conduction through composite wall cylinders; three-dimensional steady heat conduction in homogeneous materials; relaxation processes; unsteady one-dimensional heat conduction; electrical analogy; heat transfer by free and forced convection; similarity parameters; heat exchangers: radiation heat exchange between black and non-black surfaces; radiation geometric factors; reciprocity theorem; radiation from gases and flames.

TEXTBOOKS
Van Wylen, G. J. and Sonntag, R. E. Fundamentals of Classical Thermodynamics. Wiley, or

MATHEMATICS

10.111AW Calculus and Differential Equations
Partial differentiation, multiple integrals, Fourier series, complex variable, first and second order differential equations.

10.111BW Vector and Matrix Algebra
Vector algebra, vector calculus, general integral theorems, matrix algebra, eigenvalues and vectors.

10.111CW Analytic and Projective Geometry
Vector functions, conic sections, quadric surfaces, projections and projective properties.

10.111DW Theory of Functions
Fundamental point-set topology and set theory, Riemann integration, Euclidean vector spaces, uniform convergence.

TEXTBOOKS
Davis, H. F. Vector Analysis. Allyn and Bacon.

REFERENCE BOOKS
Ayres, F. Matrices. Schaum.
10.121W Pure Mathematics II (Wollongong) (Higher)
Calculus, differential equations, algebra, geometry, theory of functions for real variable, topology.
TEXTBOOKS
As for 10.111W and

10.112AW Integral Transforms and Special Functions
Laplace, Fourier, Mellin and Hankel transforms, special functions of mathematical physics.

10.112BW Abstract Algebra
Groups, rings, fields, ideals, algebraic number fields, Galois theory.

10.112CW Differential Geometry
Serret-Frenet formulae, quadratic differential forms, geodesics.

10.112DW Theory of Functions
Metric spaces, function spaces, Lebesgue integration, analytic functions and continuation, multiple-valued functions.
TEXTBOOKS

REFERENCE BOOKS
Rainville, E. D. Special Functions. Macmillan.

10.122W Pure Mathematics III (Wollongong) (Higher)
Integral transforms, special functions, algebra, geometry, theory of functions, topology.
TEXTBOOKS
As for 10.112W

10.211AW Dynamics and Vibrations
Motion of a particle and of a rigid body; normal modes, vibrations of continuous systems.

10.211BW Probability and Statistics
Probability, discrete and continuous distributions, expectations, sampling distributions, estimation, tests of hypotheses.

10.211CW Numerical Analysis
Numerical processes applied to functions, equations, differential equations, integration and matrices; direct methods and least squares.

10.211DW and 10211FW Computing A and B
Laboratory project work available in half units and related to the lecture courses.
TEXTBOOKS
Freund, J. E. Mathematical Statistics. Prentice-Hall.
REFERENCE BOOKS
Froberg, C. E. Introduction to Numerical Analysis. Addison-Wesley.

10.221W Applied Mathematics II (Wollongong) (Higher)
Dynamics, theory of vibrations, probability and statistics, numerical analysis, computing, nuclear reactor theory.

TEXTBOOKS
As for 10.211W

10.212AW Dynamics of Continuous Media
Infinitesimal elastic strain theory, Euler's equation, two-dimensional motion, compressible flow, water waves including surface, long, capillary and finite amplitude waves, dispersion, perturbation theory, interaction of waves, spectral analysis.

10.212BW Potential Theory and Methods
Laplace's and Poisson's equation, cartesian tensors, calculus of variations, optimisation of numerical process in solving differential equations, harmonic and data analysis.

10.212CW Stochastic Processes
Probability measures, random variables, branching processes, renewal processes, markov chains, test of significance, sequential analysis.

10.212DW Operations Research
Linear, non-linear and dynamic programming, queuing theory, theory of games, simulation.

TEXTBOOKS
Bullen, K. E. Introduction to Seismology. C.U.P.

REFERENCE BOOKS
Hildebrand, F. B. Methods of Applied Mathematics. Prentice-Hall.

10.222W Applied Mathematics III (Wollongong) (Higher)
Dynamics of continuous media, potential theory, stochastic processes, operations research, computing, nuclear reactor theory, meteorology, numerical analysis.

TEXTBOOKS
As for 10.212W

10.411 Mathematics II (Wollongong)
Calculus, differential equations, algebra, probability and statistics, numerical analysis, computing.

10.412W Mathematics III (Wollongong)
Integral transforms, special functions, stochastic processes, operations research, computing, and an elective.

TEXTBOOKS
10.411 and 10.412W
Students will require a selection of the second and third years' books listed above, and should consult their lecturers before purchasing their textbooks.

10.413W Mathematics IV Honours
TEXTBOOK
Whittaker, E. T. and Watson, G. Modern Analysis. C.U.P.
GEOGRAPHY

27.041W Geography I

The lectures will be divided approximately as follows: Physical Geography (35 lectures), Human Geography (40 lectures) and specific regional illustrations of the above Systematic Strand (15 lectures). The overriding theme of this course is the application of general systems theory to geographical phenomena. The practical classes will deal with use of topographic maps, introduction to air photo interpretations and graphical illustration of geographical data.

Tutorial organisation and topics will be finalised at the commencement of Term 1.

TEXTBOOKS


In addition, all students should possess a modern atlas, such as:


REFERENCE BOOKS


ENGLISH

50.111W English I

A. Language and Earlier Literature
(i) the spoken language and phonetics; (ii) the history of the English language; and (iii) selected works by Chaucer and Shakespeare.

B. Twentieth-Century Literature
(i) poetry; (ii) fiction; and (iii) drama.

RECOMMENDED READING

A. Language and Earlier Literature
(i) Gimson, A. C. An Introduction to the Pronunciation of English. Arnold.
(ii) Baugh, A. C. A History of the English Language. 2nd ed. Routledge.
(iii) Chaucer. The Nun's Priest's Tale. Sisam, ed. O.U.P.
Shakespeare. Much Ado About Nothing.
B. Twentieth-Century Literature

(i) Poetry

(ii) Fiction
Conrad. Lord Jim; Heart of Darkness.
Forster. Howards End; A Passage to India.
Joyce. A Portrait of the Artist as a Young Man.
Lawrence, D. H. The Rainbow.
Faulkner. The Sound and the Fury.
Bellow. Henderson, the Rain King.

(iii) Drama
Synge. Plays to be selected from Plays, Poems and Prose. Everyman.
Beckett. Endgame. Faber.
White. Plays to be selected from Four Plays. Sun Books.

50.112W English II
A. Nineteenth-Century Literature
B. Selected Comedies and History Plays by Shakespeare

A. Nineteenth-Century Literature
Prose
RECOMMENDED READING
Jane Austen. Emma; Mansfield Park; Persuasion.
Dickens. Oliver Twist; Martin Chuzzlewit; Our Mutual Friend.
Thackeray. Vanity Fair; Henry Esmond.
Melville. Moby Dick; Billy Budd and selected short stories.
George Eliot. The Mill on the Floss; Middlemarch.
James. The Spoils of Poynton; The Portrait of a Lady.
Butler. The Way of All Flesh.

Poetry
Blake, Wordsworth, Coleridge, Byron, Keats, Shelley, Tennyson, Browning, Arnold.
No text books will be prescribed. Students purchasing their own copies of the poetry are advised to buy the edition in the Oxford Standard Authors, where available, or for Wordsworth, Selected Poetry, Mark Van Doren, ed. (Modern Library College Edition); for Coleridge, Selected Poetry and Prose, Stauffer, ed. (Modern Library C.E.); for Keats, Complete Poetry and Selected Prose, Briggs, ed. (Modern Library C.E.), and for Tennyson, Selected Poetry, Bush, ed. (Modern Library C.E.).

B. Shakespeare
Troilus and Cressida; The Tempest.
Richard III; Henry IV (both parts); Henry V.
Students may use any good complete edition, e.g. Alexander (Collins) or Sisson (Odhams), or separate volumes of, e.g., The New Arden edition (Methuen), or the New Shakespeare (C.U.P.).

50.122 English II Honours
1. The pass course, 50.112W.
2. An Introduction to Old and Middle English Language and Literature.
3. A further study of Twentieth-Century Literature in English.
TEXTS
1. As for the pass course.
   Houghton Mifflin.
3. Reading will be prescribed in the work of the following authors:
   Joyce, Faulkner, Cary, Yeats (as poet and playwright), Eliot (as poet and playwright), Auden, Lowell, FitzGerald.

50.113W English III
A. Late Seventeenth- and Eighteenth-Century Literature
B. Shakespeare's Tragedies

A. Late Seventeenth- and Eighteenth-Century Literature
Poetry
Milton, Dryden, Pope, Swift, Johnson, Gray.

REFERENCE BOOK
Sutherland, J. A Preface to Eighteenth-Century Poetry. O.U.P.

PRELIMINARY READING
Prose
Defoe. Robinson Crusoe; Moll Flanders; A Journal of the Plague Year.
Swift. Gulliver's Travels; other selected writings.
Richardson. Pamela; Clarissa.
Smollett. Roderick Random; Humphry Clinker.
Sterne. Tristram Shandy.
Johnson. Rasselas; Lives of the Poets.
Boswell. Life of Johnson.

Drama
Selected plays by Congreve, Vanbrugh, Farquhar and Sheridan.
No text books will be prescribed. Students are advised to purchase standard editions such as the Oxford Standard Authors, where available, or for Pope, The Poems, Butt, ed. ("Twickenham" one-volume edition, Methuen); for Swift, Gulliver's Travels and other Writings, Quintana, ed. (Modern Library College Edition); and for the drama, Restoration Plays, Gosse, ed. (Everyman).

B. Shakespeare's Tragedies
Romeo and Juliet, Othello, Hamlet, King Lear, Timon of Athens, Antony and Cleopatra.

Students may use any complete edition e.g., Alexander (Collins) or Sisson (Odhams), or the separate volumes of e.g., the New Arden edition (Methuen), or the New Shakespeare (C.U.P.).

51.111W History I
European History, 1700-1950
The course is designed to survey the chief events in European history from the age of Louis XIV to present times, with emphasis on the growth of nationalism, liberalism and imperialism as forces shaping the modern world.

Term 1: 1700-1815 (a) The age of Louis XIV; (b) Origins of Prussia and Russia; (c) The Enlightenment and French Revolution; (d) Napoleon.

Term 2: 1815-1870 (a) European nationalism and liberalism; (b) Revolutions of 1848; (c) Unification of Italy; (d) Unification of Germany.

Term 3: 1870-1950 (a) Imperialism, European and British; (b) Two world wars; (c) Leaders—Hindenberg, Lenin, Stalin, Hitler, Mussolini, Churchill.
51.112W History II

English Social History, 1750-1950

The course opens with a discussion of the structure of English society circa 1800, with particular reference to the class distribution of the population, and the ideology and institutions of the landed class. It then examines standards of living, poor relief, religious belief, the state of elementary education and the sanitary condition of the country during the early years of the nineteenth century. There follows an analysis of the influences working to produce changes in this general situation during the first half of the nineteenth century—industrial and agricultural development, population growth and concentration, the emergence of class ideologies in the middle and working classes, and the activities of the various churches. The second half of the course carries the discussion of these questions through to circa 1950, again noting and seeking to explain social changes. The course concludes with a description of English society in the early 1950's.

IMPORTANT BOOKS

REFERENCE BOOKS

Students may take History IIIA, IIIB or both.

51.113W History IIIA
Australian Social History
This course examines themes in Australian social history at different stages of development. The principal themes for study are the relations between social classes, demographic change and social welfare. These involve discussion of industrial relations, the trade union movement, racial prejudice, education, social services and the problems of social democracy. The course will examine each theme in the periods 1800-1850, 1850-1900 and 1900-1950.

TEXTBOOKS

IMPORTANT BOOKS
Barcan, A. A Short History of Education in N.S.W. Martindale, Sydney, 1965.


Hancock, W. K. *Australia*. Jacaranda, Brisbane, 1966.


51.113W History IIIB

**Modern South-east Asia and New Guinea**

The first section of the course will deal briefly with the history of the region in the period before European contact. Here, as in the rest of the course, chronology will be secondary: the focus will be upon analyses of the environmental, social, religious and other factors underlying South-east Asian politics. In other words, the basic approach will be sociological. The main part of the course will consist of a comparative study of the three principal South-east Asian territories—Indonesia, Malaya and Indo-China—since about 1830. Attention will be concentrated on the metropolitan attitudes and values inherent in the systems of colonial administration of the main European powers (Holland, Britain and France), and on the reactions within the social and political systems of the indigenous peoples of the region. This will lead on to discussion of the emergence and nature of South-east Asian nationalism, and the involvement of the new states in international ideological and geopolitical conflict.

German, British and Australian administration in East New Guinea will be considered within the same broad context.

**IMPORTANT BOOKS**


BASIC REFERENCE WORKS
Legge, J. D. Australian Colonial Policy. Angus and Robertson, Sydney, 1956.

EDUCATION

58.011W Australian Education
This subject seeks to lift student awareness of problems in Australian education above the level of opinion and limited personal experience, by presenting them in their historical and comparative setting. Various developments in secondary and tertiary education are discussed, with a view to understanding the interplay of social, economic, political and ideological factors, and the need to subject them to more rigorous research.

TEXTBOOKS
58.012W Educational Practice

An appreciation of guiding principles common to the teaching of secondary school children will be gained through study of preparation at course, topic and lesson levels and utilisation of school and community resources; aspects of classroom control and discipline; individual and group techniques of teaching; and evaluation procedures including the construction and administration of tests and examinations.

REFERENCE BOOKS


58.013W Educational Psychology

A study of the behaviour of adolescents and of the significance of adolescent psychology to the teacher. Beginning with an examination of the developmental tasks appropriate to the age group, the course goes on to study, within the context of the secondary school, motivation, the range of human abilities, the learning process and the development of personality.

REFERENCE BOOKS

Havighurst, R. J. Human Development and Education. Longmans, Green and Co., 1953.

SELECTED JOURNALS
British Journal of Educational Psychology. Methuen.

58.014W Sociology of Education
The sociological aspects of education are studied with special reference to the
school. The school is seen both as a unit in the social structure and as a social
system in itself. Topics include the relation of personality and culture, home and
school, teacher and community, and the problems of migrant assimilation.

TEXT BOOKS
Brookover, W. B. and Gottlieb, D. Sociology of Education. American Book Co.,
1964.

REFERENCE BOOKS
Havighurst, R. J. and Neugarten, B. L. Society and Education. Allyn and Bacon,
1962.
Mannheim, K. and Stewart, W. A. C. An Introduction to Sociology of Education.
Routledge, 1962.
Warner, W. L. American Life: Dream and Reality. Rev. ed. University of
Chicago, 1962.

SELECTED JOURNALS

58.015W Philosophy and Theory of Education
A study of the nature and scope of educational theory. By tracing the development
of educational ideas in western culture, it is seen how the various disciplines of
educational theory have emerged to cope with problems of value, knowledge and
public education. Practice is given in the technical employment of philosophy of
education.

REFERENCE BOOKS
Curtis, S. J. and Boultonwood, M. E. A Short History of Educational Ideas.
Dewey, J. The Child and the Curriculum and The School and Society. Phoenix
N.S.S.E. 54th Yearbook. Modern Philosophies and Education. University of

SELECTED JOURNALS
Studies in Philosophy and Education. Southern Illinois University.

58.021W Commerce Method
The aim is to develop competent and critical teachers of economics and commerce. These subjects are discussed in relation to a general theory of education, problems of programming, lesson preparation and presentation. The course includes specific aspects of classroom practice in bookkeeping.

REFERENCE BOOKS
Musselman and Hannu, J. Teaching Bookkeeping and Accounting.

SELECTED JOURNALS
Economica. London School of Economics.
The Economic Record. The Economic Society of Australia and New Zealand.

58.022W English Method
This course deals with the aspects of language, expression and literature that concern the teacher in the secondary school. Language work examines contemporary theories and practice and the changing nature of linguistics studies. Expression themes include the fostering of responsive writing and aims and methods in oral practice. In the examination of literature the need is stressed to foster enjoyment and understanding at various levels. Some attention is given to testing, the programming of work and the interpretation of curricula.

REFERENCE BOOKS

SELECTED JOURNALS
English in Australia. Australian Association for the Teaching of English, Melbourne.
The Teaching of English. English Teachers' Association of N.S.W.

58.024W Geography Method
A survey of the principles and problems underlying the selection, organisation and presentation of geographical knowledge. Topics include: the place of geography in the secondary school, the nature and organisation of programmes, the inter-relationship of systematic and regional geography, and specific aspects of classroom practice and field studies.

54
I. As for the pass course.

3. Reading will be prescribed in the work of the following authors: Joyce, Faulkner, Cary, Yeats (as poet and playwright), Eliot (as poet and playwright), Auden, Lowell, F.itzGerald.

50.113W English III

A. Late Seventeenth- and Eighteenth-Century Literature
B. Shakespeare's Tragedies

A. Late Seventeenth- and Eighteenth-Century Literature
Poetry
Milton, Dryden, Pope, Swift, Johnson, Gray.

REFERENCE BOOK
Sutherland, J. A Preface to Eighteenth-Century Poetry. O.U.P.

PRELIMINARY READING

Prose
Defoe. Robinson Crusoe; Moll Flanders; A Journal of the Plague Year.
Swift. Gulliver's Travels; other selected writings.
Richardson. Pamela; Clarissa.
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Sterne. Tristram Shandy.
Johnson. Rasselas; Lives of the Poets.
Boswell. Life of Johnson.

Drama
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Term 3: 1870-1950 (a) Imperialism, European and British; (b) Two world wars; (c) Leaders — Hindenberg, Lenin, Stalin, Hitler, Mussolini, Churchill.
IMPORTANT BOOKS:

REFERENCE BOOKS

51.112W History II
English Social History, 1750-1950
The course opens with a discussion of the structure of English society circa 1800, with particular reference to the class distribution of the population, and the ideology and institutions of the landed class. It then examines standards of living, poor relief, religious belief, the state of elementary education and the sanitary condition of the country during the early years of the nineteenth century. There follows an analysis of the influences working to produce changes in this general situation during the first half of the nineteenth century—industrial and agricultural development, population growth and concentration, the emergence of class ideologies in the middle and working classes, and the activities of the various churches. The second half of the course carries the discussion of these questions through to circa 1950, again noting and seeking to explain social changes. The course concludes with a description of English society in the early 1950’s.

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REFERENCE BOOKS
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TEXTBOOKS


IMPORTANT BOOKS

Barcan, A. A Short History of Education in N.S.W. Martindale, Sydney, 1965.
51.I13W History IIIB

Modern South-east Asia and New Guinea

The first section of the course will deal briefly with the history of the region in the period before European contact. Here, as in the rest of the course, chronology will be secondary: the focus will be upon analyses of the environmental, social, religious and other factors underlying South-east Asian politics. In other words, the basic approach will be sociological. The main part of the course will consist of a comparative study of the three principal South-east Asian territories—Indonesia, Malaya and Indo-China—since about 1830. Attention will be concentrated on the metropolitan attitudes and values inherent in the systems of colonial administration of the main European powers (Holland, Britain and France), and on the reactions within the social and political systems of the indigenous peoples of the region. This will lead on to discussion of the emergence and nature of South-east Asian nationalism, and the involvement of the new states in international ideological and geopolitical conflict.

German, British and Australian administration in East New Guinea will be considered within the same broad context.

IMPORTANT BOOKS


<table>
<thead>
<tr>
<th>Faculty</th>
<th>Course</th>
<th>Award</th>
<th>Duration (Years)</th>
<th>Stages available at W'gong in 1969</th>
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<tr>
<td>Applied Science</td>
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<td></td>
<td>Chemical Engineering</td>
<td>B.Sc. (Tech)</td>
<td>6</td>
<td>3</td>
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<tr>
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<td>Food Technology</td>
<td>B.Sc. (Tech)</td>
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<td>Metallurgy</td>
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<td>2</td>
</tr>
</tbody>
</table>

* With the approval of the Head of School concerned, each of the part-time Commerce courses may be completed in five years.
GRADUATE STUDIES

Facilities are available for post-graduate studies at the College leading to the several degrees of M.A., M.Com., M.E., M.Sc., M.Eng.Sc., and Ph.D. In addition, a postgraduate course in education were offered for the first time in 1968. The research interests of the staff cover a wide range of topics and persons interested in pursuing postgraduate studies should contact the appropriate Head of the Department.

Some current fields of interest are:

**CHEMISTRY**

- Chemistry of natural products—alkaloids and hallucinogenic fungi.
- Correlation of chemical structure with physiological activity.
- Synthetic organic chemistry.
- Physical-organic chemistry—kinetic studies of hydrolysis and measurement of thermodynamic acidity constants.
- Chemical spectroscopy.
- Vanadium and tin complexes.
- Magnetochemistry of copper II complexes.
- Catalytic deuterium exchange reactions.

**GEOLOGY**

- The geology of the regional coal measures.

**MATHEMATICS**

- Nuclear reactor theory and related stochastic processes.
- Oceanography.
- Urban population distributions.

**PHYSICS**

- Astronomy—photoelectric observations in the infra-red.
- High current electron beams.
- Mössbauer studies of alloys.

**CIVIL AND MECHANICAL ENGINEERING**

- Propagation of waves in air in small bore tubes.
- Losses across valves of reciprocating air compressors.
- Flow of granular materials.
- Theoretical analysis of engine cycles.
- Applied mechanics and photo elasticity.
ELECTRICAL ENGINEERING

Automatic control.
Plant identification.
Electrostatic precipitation.

METALLURGY

Deformation at elevated temperatures.
Phase transformation including studies of the solidification process.

ACCOUNTANCY

Cost classification for decision making and cost control.

HISTORY

European history during the period 1660-1800.
Nineteenth and twentieth century British history.
Any area of Australian history.
Any aspect of modern colonial history, especially the history of Africa, the Pacific and South East Asia.

ECONOMICS

Regional studies.
Co-operatives.
Decentralization.

PSYCHOLOGY

Sensory deprivation.
Factors affecting academic achievement of senior school pupils.
Vocational and personnel selection.
Factors related to the perceptual influences of sensory deprivation.
DIPLOMA IN EDUCATION

Since 1966, courses leading to the Diploma in Education and Master of Education have been offered through the School of Education, at Kensington. Details of Masters' courses may be found in Section C of the University of New South Wales Calendar. Since 1968, a Diploma course has been available in Wollongong also. Intended as a professional course in education for graduates of this or another approved university preparing to teach in secondary schools, it also serves as an introduction to the research disciplines of education for students who will later pursue higher studies in education. As present, the course is for one year full-time, but it is anticipated that in the near future it will be possible for this course to be taken over two years on a part-time basis. The various subjects involve lectures, seminars, tutorials, individual assignments and group exercises, demonstrations of teaching methods and practice teaching are provided in co-operation with the Wollongong Teachers’ College and local schools.

COURSE OUTLINE

<table>
<thead>
<tr>
<th>Education</th>
<th>Hours per week</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Education</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Educational Practice</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sociology of Education</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Philosophy and Theory of Education</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Seminars</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Methods of Teaching

Students must study two methods (including demonstration lessons) ........................................ 6–8

Selected Topics ........................................ 5

Supervised Teaching Practice

Eight weeks in term time. Two weeks of unsupervised teaching practice is also required.

RADIO COURSES

The University’s radio station, VL2UV, which broadcasts on a frequency of 1750Kc's, began operating in May, 1961, and now offers programmes five nights a week. The University also has its own postgraduate television network, VITU, but at present it is not possible for programmes from the University television station to be received at home. Students enrolling in radio courses receive printed notes which are essential for an understanding of the lectures. Seminars conducted in conjunction with the radio courses give students an opportunity to discuss with the lecturers any difficulties they may have had with the material.
Students in Wollongong may take advantage of this service by means of tape-recorded correspondence courses, which are offered to country students at extension centres or wherever a group of students exists. The programmes are recorded on twin track 5'' reels of standard magnetic tape, and can be played on most tape recorders. Over forty courses are available, and in country areas groups of as few as three students may participate at fees comparable to those paid by students in metropolitan areas. Many enrolments have been accepted from students in other States and overseas.

The emphasis of radio courses is on postgraduate and refresher courses for professional people, and subjects covered range from specialities in Medicine and Dentistry to Operations Research and Computer Programming. School-University bridging courses, another service of Radio University, are meeting a pressing need. These courses are designed to assist students who are proceeding from secondary school to first year university studies, but they are also helpful to students taking the Higher School Certificate.

Further information on Radio University programmes may be obtained from the Division of Postgraduate Extension Studies, University of New South Wales, P.O. Box 1, Kensington, N.S.W., 2033.

IDENTIFICATION OF SUBJECTS BY NUMBERS

Each subject provided by a School has an identifying number. The integer is the identifying number of the School and the numbers after the decimal point distinguish the subject from others conducted by that School, some of which may have the same name. For example, the subject number for Psychology in the first year Arts Course is 12.001 whereas the Psychology course taught as a General Studies elective has the number 26.121.

Another example is 5.301S Engineering Mechanics where the “S” indicates that the subject is taught over twenty-four weeks with a final examination held in the September period. The same subject is also taught over thirty weeks with the examination in November, and in this case has the number 5.301.

As well as providing an unambiguous means of identifying subjects with the same or similar names, the subject number is also used in the recording of enrolment and examination information on machine data processing equipment. It is therefore essential that students should cite both the correct subject name and the correct subject number in all correspondence or on forms dealing with subjects.
You should become familiar with the identifying numbers of the Schools in which you will be studying, according to the following list:

<table>
<thead>
<tr>
<th>Identifying Number</th>
<th>School or Department</th>
<th>Identifying Number</th>
<th>School or Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School of Physics</td>
<td>41</td>
<td>School of Biochemistry</td>
</tr>
<tr>
<td>2</td>
<td>School of Chemistry</td>
<td>42</td>
<td>School of Biological Technology</td>
</tr>
<tr>
<td>3</td>
<td>School of Chemical Engineering</td>
<td>43</td>
<td>School of Botany</td>
</tr>
<tr>
<td>4</td>
<td>School of Metallurgy</td>
<td>44</td>
<td>School of Microbiology</td>
</tr>
<tr>
<td>5</td>
<td>School of Mechanical and Industrial Engineering</td>
<td>45</td>
<td>School of Zoology</td>
</tr>
<tr>
<td>6</td>
<td>School of Electrical Engineering</td>
<td>50</td>
<td>School of English</td>
</tr>
<tr>
<td>7</td>
<td>School of Mining Engineering</td>
<td>51</td>
<td>School of History</td>
</tr>
<tr>
<td>8</td>
<td>School of Civil Engineering</td>
<td>52</td>
<td>School of Philosophy</td>
</tr>
<tr>
<td>9</td>
<td>School of Wool and Pastoral Sciences</td>
<td>53</td>
<td>School of Sociology</td>
</tr>
<tr>
<td>10</td>
<td>School of Mathematics</td>
<td>54</td>
<td>School of Political Science</td>
</tr>
<tr>
<td>11</td>
<td>School of Architecture and Building</td>
<td>55</td>
<td>School of Librarianship</td>
</tr>
<tr>
<td>12</td>
<td>School of Applied Psychology</td>
<td>56</td>
<td>School of French</td>
</tr>
<tr>
<td>13</td>
<td>School of Textile Technology</td>
<td>57</td>
<td>School of Drama</td>
</tr>
<tr>
<td>14</td>
<td>School of Accountancy</td>
<td>58</td>
<td>School of Education</td>
</tr>
<tr>
<td>15</td>
<td>School of Economics</td>
<td>59</td>
<td>School of Russian</td>
</tr>
<tr>
<td>16</td>
<td>School of Hospital Administration</td>
<td>60</td>
<td>Special Wollongong Subjects</td>
</tr>
<tr>
<td>17</td>
<td>Biological Sciences</td>
<td>61</td>
<td>School of History and Philosophy of Science</td>
</tr>
<tr>
<td>18</td>
<td>Department of Industrial Engineering</td>
<td>62</td>
<td>School of Social Work</td>
</tr>
<tr>
<td>19</td>
<td>School of Traffic Engineering</td>
<td>63</td>
<td>School of German</td>
</tr>
<tr>
<td>20</td>
<td>School of Highway Engineering</td>
<td>64</td>
<td>School of Spanish</td>
</tr>
<tr>
<td>21</td>
<td>Department of Industrial Arts</td>
<td>65</td>
<td>Wollongong General Studies Subjects</td>
</tr>
<tr>
<td>22</td>
<td>School of Chemical Technology</td>
<td>66</td>
<td>School of Anatomy</td>
</tr>
<tr>
<td>23</td>
<td>School of Nuclear Engineering</td>
<td>67</td>
<td>School of Medicine</td>
</tr>
<tr>
<td>24</td>
<td>School of Business Administration</td>
<td>68</td>
<td>School of Pathology</td>
</tr>
<tr>
<td>25</td>
<td>School of Applied Geology</td>
<td>69</td>
<td>School of Physiology</td>
</tr>
<tr>
<td>26</td>
<td>Department of General Studies</td>
<td>70</td>
<td>School of Surgery</td>
</tr>
<tr>
<td>27</td>
<td>School of Geography</td>
<td>71</td>
<td>School of Obstetrics and Gynaecology</td>
</tr>
<tr>
<td>28</td>
<td>Department of Marketing</td>
<td>72</td>
<td>School of Paediatrics</td>
</tr>
<tr>
<td>29</td>
<td>School of Applied Physics and Optometry</td>
<td>73</td>
<td>School of Psychiatry</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>74</td>
<td>School of Human Genetics</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>75</td>
<td>Public Health and Social Medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76</td>
<td>Division of Postgraduate Extension Studies</td>
</tr>
</tbody>
</table>

In Section D of the Calendar a short syllabus is given for each subject. The subjects are grouped under the name of the School providing them and the Schools are listed in their numerical order.

**UNDERGRADUATE SCHOLARSHIPS AVAILABLE AT THE COLLEGE**

Various scholarships, bursaries and cadetships are tenable at The University of New South Wales and Wollongong University College.

Except where otherwise specified, applications on the forms obtainable from the Senior Administrative Officer must be lodged with him within seven days of the publication of the results of the Higher School Certificate Examination.

A separate application must be lodged for each category of scholarship listed below except that applicants for scholarships in Textile Technology and Wool Technology will automatically be considered for the scholarships which are offered in the same field by the Wool Research Trust Fund.

In addition to those scholarships made available by the University and other bodies as set out below, a number of industrial organizations
and Government Departments sponsor students at the University. These students generally have their University fees paid by the employer and are employed at cadet rates of pay during their course.

Certain scholarships are tenable only at this College. In this category the Australian Iron and Steel Pty. Ltd. provides a number of scholarships.

Further particulars about these and other scholarships, cadetships and bursaries may be obtained from the Senior Administrative Officer, Wollongong University College, Wollongong.

Commonwealth University Scholarships

Students enrolling in first degree courses at the University are eligible. Benefits include payment of all tuition fees and other compulsory fees, and living allowances (these latter being subject to a means test). The closing date for applications is 30th September in the year immediately preceding that for which the scholarship is desired. Full particulars and application forms may be obtained from the Officer-in-Charge, Sydney Office, Department of Education and Science, La Salle Building, 70 Castlereagh Street, Sydney, 2000 (Telephone 25 5447).

University Scholarships

The University annually awards up to fifteen scholarships tenable in degree courses to students who have matriculated at the Higher School Certificate Examination; ten scholarships to students who have completed Certificate Courses (Department of Technical Education); ten scholarships to students who have completed Trade Courses (Department of Technical Education); and ten scholarships to part-time students who have taken the Diploma Entrance course of the Department of Technical Education. The scholarships are tenable in any faculty and exempt the holder from payment of course fees during the currency of the scholarship. Scholarships will be awarded in order of merit on Higher School Certificate Examination results. They may be held only by persons who do not hold another award. Applications must be lodged after publication of Higher School Examination results and after the announcement of the award of Commonwealth University Scholarships, but not later than 31st January each year.

Food Technology Scholarships

A number of scholarships are usually made available by firms in the food processing industries. These scholarships have a value of from
$600 to $1,000 per annum, payable as a living allowance to students enrolled full-time in the Food Technology degree course. These scholarships may be held concurrently with a Commonwealth University Scholarship.

Mining Scholarships

The Joint Coal Board is offering scholarships to male students who desire to enter the full-time degree courses in Mining Engineering and Applied Geology. The value of these scholarships ranges from $700 to $1,200 per annum (including allowance for books and instruments). These scholarships will be awarded on the understanding that applicants will normally hold a Commonwealth University Scholarship which covers the cost of University fees. However, applicants without Commonwealth University Scholarships may be given consideration. While scholarship holders are not under bond it is expected that they will obtain employment in Coal Mining or a related industry on graduation. Applications on forms obtainable from headmasters or from the Secretary, Joint Coal Board, Box 3842, G.P.O., Sydney, must be lodged with the Board’s secretary not later than seven days after the publication of Higher School Certificate results.

Textile Technology Scholarships

The textile industry provides a number of scholarships for students wishing to enrol in courses leading to the degree of Bachelor of Science (Pass and Honours) in Textile Technology. Each scholarship has a value of $1000 per annum and may be held concurrently with a Commonwealth University Scholarship. An applicant for this scholarship will also receive consideration for the Wool Research Trust Fund Scholarships in Textile Technology.

Wool Technology Scholarships

Several firms and banks associated with the wool industry endow scholarships in courses leading to the Bachelor of Science degree in Wool Technology. Valued from $600 to $1000 per annum, these scholarships are normally tenable for four years, and may be held concurrently with a Commonwealth University Scholarship. An applicant for these scholarships will also receive consideration for the Wool Research Trust Fund Scholarships in Wool Technology.
Wool Research Trust Fund Scholarships in Wool Technology and Textile Technology

Several scholarships for courses in Wool Technology and Textile Technology have been made available by the Wool Research Trust Fund (Commonwealth Government). The scholarships provide an allowance of $800 per annum for living expenses for four years, and successful applicants may hold a Commonwealth University Scholarship concurrently.

Scholarship in Wool Commerce

One scholarship is available for students proceeding to the degree of Bachelor of Commerce in Wool Commerce. It is being provided by Felt and Textiles of Australia Ltd., and is tenable for four years at a value of $200 per annum. It may be held concurrently with a Commonwealth University Scholarship.

C.S.R. Scholarship in Commerce

The Colonial Sugar Refining Co. Ltd., offers one scholarship each year to students enrolling in courses leading to the degree of Bachelor of Commerce specialising in Economics, Accountancy, Statistics, Applied Psychology or Industrial Relations. The scholarship holder will study full-time at the University during the first and fourth years of tenure; during the second and third years the scholar will be employed by the Company and enrol as a part-time student, being allowed some time off from work to attend day classes. The value of the scholarship is $1200 per annum when studying full-time, and during the years of part-time employment with the Company the holder will be paid according to the Company's basic salary scale. This award may be held concurrently with a Commonwealth University Scholarship.

Manufacturers' Mutual Insurance Company Scholarship in Commerce

The Manufacturers' Mutual Insurance Company offer a scholarship each year to the value of $200 per annum. The scholarship is available to students who desire to enter or are enrolled in one of the full-time courses in the Faculty of Commerce leading to the Degree of Bachelor of Commerce and specialising in either Economics, Accountancy, Statistics, Applied Psychology or Industrial Relations. The scholarship will normally be tenable for three years but may be extended for a fourth year to allow the holder to proceed to a degree with honours. The scholarship may be held concurrently with another scholarship.
Scholarships in Industrial Arts

Two scholarships, valued at $100 per annum, are offered each year by the Institute of Industrial Engineers to students entering the full-time course in Industrial Arts leading to the B.Sc. degree. The scholarships are tenable for four years, and may not be held concurrently with any award except one providing solely for the payment of compulsory University fees.

Scholarships in Electrical Engineering

The Tyree Electrical Company Pty. Ltd. provides two scholarships for students enrolling in the full-time courses in Electrical Engineering. The scholarships have a value ranging from $500 to $1,500 p.a. depending on the circumstances and progress of the successful applicants. They are normally tenable for four years but may be extended to a fifth year when the holder intends to qualify for the two degrees, Bachelor of Science and Bachelor of Engineering. It may be held concurrently with any other scholarship.

Ceramic Engineering Scholarships

The Brick Manufacturers’ Association of New South Wales and the State Brickworks of the New South Wales Department of Public Works each offer one undergraduate scholarship in ceramic engineering. Students who have completed the first year of the course may also apply. The value of the scholarship is $900 per annum, and applicants are expected to apply for a Commonwealth University Scholarship to cover course and other fees.

The Clement Blazey Memorial Scholarships—Metallurgy

Metal Manufactures Ltd. of Port Kembla, provide the Clement Blazey Memorial Scholarships for students enrolling in the full-time course in Metallurgy leading to the Degree of Bachelor of Science. Each scholarship has a value of between $200 to $800 per annum payable to students as a living allowance. The scholarships will normally be tenable for four years and may be held concurrently with a Commonwealth University Scholarship.

Australian Iron and Steel Pty. Ltd. Scholarships in Metallurgy

Australian Iron and Steel Pty. Ltd. has undertaken to provide two scholarships for students wishing to enrol in the full-time course for the Bachelor of Science degree in Metallurgy. The scholarships are valued at between $360 and $700 per annum, and applicants are expected to
apply for a Commonwealth University Scholarship to cover course and other fees.

**C.I.G.-E.M.F. Scholarships in Metallurgy**

The Commonwealth Industrial Gases Limited of Sydney has undertaken to provide scholarships for students wishing to enrol in the full-time course for the B.Sc. degree in metallurgy. Each scholarship has a value of $1,000 and may be tenable for a maximum of four years. Applicants are expected to apply for a Commonwealth University Scholarship to cover course and other University fees.

**Teachers' College Scholarships**

A limited number of Teachers’ College Scholarships are available to allow students to undertake studies for a University degree, to be followed by a year devoted exclusively to training as a teacher. Benefits include the payment of University fees and a scholarship allowance.

Scholarship holders are expected to attend the University appropriate to the home address of their parents or legal guardian. The area appropriate to students for Wollongong University College is bounded by a line drawn through and including Helensburgh, Braidwood and Moruya and whose training can be adequately undertaken at Wollongong University College.

Further information, application forms and the Teachers’ College Scholarship Handbook may be obtained from the Officer in Charge, Teacher Training Division, Department of Education and Science, Blackfriars Street, Chippendale, N.S.W., 2006.

**Bursaries Awarded by The Bursary Endowment Board**

A number of bursaries tenable at the University are awarded to candidates of merit at the Higher School Certificate Examination whose family income falls within certain limits prescribed by the Bursary Endowment Board.

Application should be made to the Secretary, Bursary Endowment Board, c/o Department of Education, Bridge Street, Sydney.

**PRIZES**

A number of prize awards, made possible by the generosity of sponsors, are available for competition by students at the College.
The Austin Keane Prize
Awarded to the student who most excels in the subject Applied Mathematics III.
1967 P. Castle

The S. A. Senior Prize
Awarded to the student who most excels in the subject Pure Mathematics III.
1967 P. Castle

The Australian Institute of Metals (Port Kembla Branch) Metallurgy Prize
Awarded each year to the graduate who has shown the best general proficiency throughout the full course.
1967 No award

The Peter Beckmann Memorial Prize
Awarded to the most deserving student in Chemistry III.
1967 R. B. Brown

The Illawarra Branch of the N.S.W. Association of University Women Graduates’ Prize for Women Students
Awarded to the final year woman graduate with the best academic record.
1967 Miss L. R. Dryden

The G. W. Daniels Memorial Prize
Awarded to the student who most excels in the subject Chemistry II.
1967 C. R. Pidgeon

The Illawarra Group of the Institution of Engineers, Australia, Prize
Awarded to the final year student proceeding to an undergraduate degree in Engineering with the best academic record.
1967 K. W. Watts

Darryl Condon Memorial Prize
Awarded to the student proceeding to an undergraduate degree in Metallurgy who most excels in the subject Metallurgy I.
1967 B. D. Murray
The Library

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Student Services

THE UNIVERSITY COLLEGE UNION

Situated at the southwest end of the campus, the Union building was opened in 1965. The Union provides opportunities for the development of social and intellectual intercourse between members.

Membership is compulsory for all students, and many of the staff elect to become members. The building includes a large common room and a number of small rooms, all of which are available to members for recreational and cultural purposes. Light refreshments are provided during term time. The Union is managed by a board comprising Council, Advisory Committee, Student and Staff representatives.

THE LIBRARY

Emphasis is placed by the College on instruction to help students make the best use of the library facilities. Special courses to assist students in the preparation of laboratory reports, essays and seminars are conducted by the library staff.

The library, which contains over 20,000 books, is open on Monday to Thursday from 8.45 a.m. to 8 p.m., on Friday from 8.45 a.m. to 5 p.m., and on Saturday from 9 a.m. to 1 p.m.

For additional information on the library, consult the leaflet, “Enrolment Procedure for New Students”.

CHAPLAINCY SERVICE

A Chaplaincy Service is provided within the College for the benefit of students and staff by three Christian Churches.

The Service offers fellowship, personal counselling and guidance, and leadership in biblical and doctrinal studies and in worship. The Chaplains maintain close liaison with student religious societies. They may be contacted at their private addresses.

Anglican: Rev. J. Baxter,
8 Banool Street,
Keiraville, N.S.W., 2500.

Roman Catholic: The Rev. Father S. A. Mitchell, S.M., B.A.,
St. Paul’s College,
Bellambi, N.S.W., 2518. Tel.: 84-2564.
STUDENTS' TRAVELLING CONCESSION PASSES

The various transport authorities provide fare concessions for certain classes of students.

Application forms for these concessions may be obtained at the Cashier's Office, Main Building.

Train:
(a) Periodical tickets are available during term time to full-time students not in employment nor in receipt of any remuneration.

(b) Vacation travel concessions are available to students qualifying under (a) above.

Aircraft: Concession fares for travel overseas, inter-state and intra-state are available under the conditions ruling for the various operating companies.

LOST PROPERTY

All enquiries concerning lost property should be made to the Cashier's Office.
Procedures

PAYMENT OF FEES

Completion of Enrolment

All students are required to attend the appropriate enrolment centre during the prescribed enrolment period for authorisation of course programme. Failure to do so will incur a late fee of $6.

Fees should be paid during the prescribed enrolment period but will be accepted during the first two weeks of First Term. (For late fees see below.) No student is regarded as having completed an enrolment until fees have been paid. Fees will not be accepted (i.e., enrolment cannot be completed) from new students after the end of the second week of term (i.e., 14th March, 1969), and after 31st March from students who are re-enrolling except with the express approval of the Senior Administrative Officer, which will be given in exceptional circumstances only.

Payment of Fees by Term

Students who are unable to pay their fees by the year may pay by the term, in which case they are required to pay first term course fees and other fees for the year, within the first two weeks of First Term. Students paying under this arrangement will receive accounts from the University for Second and Third Term fees. These fees must be paid within the first two weeks of each term.

Assisted Students

Scholarship holders or Sponsored Students who have not received an enrolment voucher or appropriate letter of authority from their sponsor at the time when they are enrolling should complete their enrolment paying their own fees. A refund of fees will be made when the enrolment voucher or letter of authority is subsequently lodged with the Cashier.

Extension of Time

Any student who is unable to pay fees by the due date may apply in writing to the Senior Administrative Officer for an extension of time. Such application must give year or stage, whether full-time or part-time, and the course in which the applicant wishes to enrol, state clearly and fully the reasons why payment cannot be made and the extension sought, and must be lodged before the date on which a late fee becomes payable. Normally the maximum extension of time for the payment of
fees is until 31st March for fees due in First Term and for one month from the date on which a late fee becomes payable in Second and Third Terms.

Where an extension of time is granted to a first year student in First Term, such student is not permitted to attend classes until fees are paid, and if seeking to enrol in a restricted faculty may risk losing the place allocated.

Failure to Pay Fees

Any student who is indebted to the University and who fails to make a satisfactory settlement of his indebtedness upon receipt of due notice ceases to be entitled to membership and privileges of the University. Such a student is not permitted to register for a further term, to attend classes or examinations, or to be granted any official credentials.

No student is eligible to attend the annual examinations in any subject where any portion of his course fees for the year is outstanding after the end of the fourth week of Third Term (26th September, 1969).

In very special cases the Senior Administrative Officer may grant exemption from the disqualification referred to in the two preceding paragraphs upon receipt of a written statement setting out all relevant circumstances.

UNDERGRADUATE COURSE FEES*
(Degree, Diploma and Conversion)

Where course fees are assessed on the basis of term hours of attendance the hours for each subject for purposes of fee assessment shall be those prescribed in the Calendar, irrespective of any variation from the prescribed hours which may be necessary in conducting the subject. The granting of an exemption from portion of any of the requirements of a subject in which a student is enrolled does not carry with it any exemption from the payment of fees.

(a) Courses in the Faculties of Applied Science, Biological Sciences, Engineering and Science and degree courses in Industrial Arts and Sheep and Wool Technology.

For the purpose of fee determination assessment is on a term basis.

A full-time course fee will be charged for any term where more than 15 hours’ per week instruction, etc., is involved.

*Fees quoted in this schedule are current at the time of publication and may be amended by the Council without notice.
(i) Full-time Course Fee (more than 15 hours' attendance per week)—$110 per term. In courses where attendance in 3rd term, either at lectures or survey camp, is less than five weeks, the fee for this term is $55.

(ii) Part-time Course Fee—over 6 hours' and up to 15 hours' attendance per week—$55 per term.

(iii) Part-time Course Fee—6 hours' or less attendance per week—$28 per term.

(iv) Course Continuation Fee—A fee of $23 per annum (no term payment) is payable by:

Category (a) students who have once been enrolled for a thesis and have only that requirement outstanding, or

Category (b) students given special permission to take annual examinations without attendance at the University. (Students in this category are not required to pay the subscriptions to the College Union, the Students' Union, the Sports Association and the Library fee.)

(b) Commerce Courses.

For the purpose of fee determination assessment is on a term basis. A full-time course fee will be charged for any term where more than 11 hours' per week instruction, etc., is involved.

(i) Full-time Course Fee (more than 11 hours' attendance per week)—$92 per term.

(ii) Part-time Course Fee—over 4 hours' and up to 11 hours' attendance per week—$55 per term.

(iii) Part-time Course Fee—4 hours' or less attendance per week—$28 per term.

(iv) Course Continuation Fee—A fee of $23 per annum (no term payment) is payable by:

Category (a) students who have once been enrolled for a thesis and have only that requirement outstanding, or

Category (b) students given special permission to take annual examinations without attendance at the University. (Students in this category are not required to pay the subscriptions to the College Union, the Students' Union, the Sports Association and the Library fee.)
(c) Arts Courses*

(i) Pass—$84 per annum per subject or $28 per term per subject.

(ii) Honours—an additional $26 per annum per subject in which honours is taken in student’s second and third years and $110 per subject per annum in the fourth year.

(d) Miscellaneous Subjects.

(i) Undergraduate subjects taken as “miscellaneous subjects” (i.e. not for a degree or diploma) or to qualify for registration as a candidate for a higher degree are assessed where they appear only in an Arts course (except where approved as the humanities component in another course) according to paragraph (c) “Arts courses”, above. Where the honours section only of an Arts subject is taken the fee payable is the subject fee for a pass Arts subject. All other subjects taken as miscellaneous subjects are assessed according to paragraph (a) “Courses in the Faculties of Applied Science etc.” above.

In cases where a student takes a programme of miscellaneous subjects from more than one of the categories referred to above the fees are assessed in accordance with paragraph (a) “Courses in the Faculties of Applied Science etc.” above.

(ii) Students given approval to enrol in a miscellaneous subject or subjects in addition to being enrolled in a course are assessed according to the total hours of attendance as if the additional subject formed part of the course.

OTHER FEES

In addition to the course fees set out above all registered undergraduates will be required to pay—

Matriculation Fee—$7 payable at the beginning of first year.
Library Fee—annual fee—$12.
College Union—$12—annual subscription.
Sports Association—$2—annual subscription.
Students’ Union—$3—annual subscription.

*Students transferring from the Arts course to a course other than Arts and claiming credit for subjects taken in the Arts course shall have their fees for these subjects re-assessed retrospectively to conform to those payable for the course to which they transfer.
Student Activities Fee—$2—annual subscription.
Graduation Fee—$7—payable at the completion of the course.

Depending on the course being taken, students may also be required to pay a Chemistry Kit Hiring Charge—$4 per kit. Additional charge for breakages and losses in excess of $1 may be required.

Special Examination Fees
Deferred examination—$5 for each subject.
Examinations conducted under special circumstances—$7 for each subject.
Review of examination result—$7 for each subject.

LATE FEES
First Enrolments—
Fees paid on the late enrolment session and before commencement of term $6
Fees paid during the 1st and 2nd weeks of term $12
Fees paid after the commencement of the 3rd week of term with the express approval of the Senior Administrative Officer and Head of the School concerned $23

Re-Enrolments
First Term—
Failure to attend enrolment centre during enrolment week $6
Fees paid after the commencement of the 3rd week of term to 31st March $12
Fees paid after 31st March where accepted with the express approval of the Senior Administrative Officer $23

Second and Third Terms—all enrolments—
Fees paid in 3rd and 4th weeks of term $12
Fees paid thereafter $23
Late lodgement corrected Enrolment Details Forms (late applications will be accepted for three weeks only after prescribed dates) $5
WITHDRAWAL FROM COURSE

Students withdrawing from a course are required to notify the Senior Administrative Officer in writing. Fees for the course accrue until a written notification is received.

Where notice of withdrawal from a course is received by the Senior Administrative Officer before the first day of First Term a refund of all fees paid other than the matriculation fee will be made.

Where a student terminates for acceptable reasons a course of study before half a term has elapsed, one half of the term's fee may be refunded. Where a student terminates a course of study after half a term has elapsed, no refund may be made in respect of that term's fees.

The Library fee is an annual fee and is not refundable where notice of withdrawal is given after the commencement of First Term.

On notice of withdrawal a partial refund of other fees is made on the following basis:—

Wollongong University College Union—where notice is given prior to the end of the fifth week of first term $1.50, thereafter no refund.

Wollongong University College Sports Association—where notice is given prior to 30th April a full refund is made, thereafter no refund.

CASHIER'S HOURS

The Cashier's office is open for the payment of fees from 9.30 a.m. to 1 p.m., and from 2 p.m. to 4.30 p.m., Monday to Friday. The Cashier's office is open for additional periods during the first two weeks of each term. Details of these additional times may be obtained from notices posted at the College before the commencement of term.

CHANGES IN COURSE PROGRAMMES AND WITHDRAWAL FROM SUBJECTS

Students seeking approval to substitute one subject for another or add one or more subjects to their programme must make application to the Head of the School responsible for the course on a form available from School offices. In the case of students wishing to withdraw from subjects or terminate their enrolment, the application must be lodged with the
Senior Administrative Officer. He will inform students of the decision. Approval of withdrawal from subjects is not automatic, each application being determined after considering the circumstances advanced as justifying withdrawal. It is emphasised that withdrawal from subjects after Term I or failure to sit for the examinations in any subjects for which the student has enrolled is regarded as failure to pass the subjects unless written approval to withdraw has been obtained from the Senior Administrative Officer.

 **RESUMPTION OF COURSES**

Students wishing to resume their studies after an absence of twelve months or more are required to apply to the Senior Administrative Officer for permission to re-enrol by 20th January, 1969. Students re-enrolling in this way will normally be required to satisfy conditions pertaining to the course at the time of re-enrolment. This condition applies also to students who have been re-admitted to a course after exclusion under the rules restricting students re-enrolling.

 **CHANGE OF ADDRESS**

Students are requested to notify the Senior Administrative Officer in writing of any change in their address as soon as possible. Failure to do this could lead to important correspondence or course information not reaching the student. The College cannot accept responsibility if official communications fail to reach a student who has not notified the Senior Administrative Officer of a change of address.

*The Union Building.*
The Fluid Mechanics Laboratory
Rules Affecting Students

ATTENDANCE AT CLASSES

Students are expected to be regular and punctual in attendance at all classes in the course or subject in which they are enrolled. All applications for exemption from attendance at lectures or practical classes must be made in writing to the Senior Administrative Officer.

In the case of illness or of absence for some other unavoidable cause a student may be excused by the Senior Administrative Officer from non-attendance at classes for a period of not more than one month, or on the recommendation of the Dean of the appropriate Faculty for any longer period.

Applications to the Senior Administrative Officer for exemption from re-attendance at classes, either for lectures or practical work, may only be granted on the recommendation of the Head of the appropriate School. The granting of an exemption from attendance does not carry with it exemption from payment of fees.

Application forms for exemption from lectures are available at the Administrative Office and should be lodged there (with a medical certificate where applicable). If term examinations have been missed this fact should be noted in the application.

Where a student has failed a subject at the annual examinations in any year and re-enrolls in the same course in the following year, he must include in his programme of studies for that year the subject in which he has failed. This requirement will not be applicable if the subject is not offered the following year; is not a compulsory component of a particular course; or if there is some other cause, which is acceptable to the Professorial Board, for not immediately repeating the failed subject.

Where a student has attended less than eighty per cent of the possible classes, he may be refused permission to sit for the examination in that subject.

ANNUAL EXAMINATIONS

The annual examinations take place in November-December for students in 30-week courses, and in September for students in 21-24-week courses. Timetables showing time and place at which individual examinations will be held are posted on the central notice boards. Mis-reading of the timetable is not an acceptable excuse for failure
to attend an examination. Examination results are posted to the term addresses of students. No results will be given by telephone.

Examination results may be reviewed for a fee of $7 a subject, which is refundable in the event of an error being discovered. Applications for review must be submitted on the appropriate form, together with the necessary fee by the date indicated on the notification of results.

In the assessment of a student’s progress in University courses, consideration is given to work in laboratory and class exercises and to any term or other tests given throughout the year, as well as to the annual examination results.

A student who through serious illness or other cause outside his control is unable to attend an examination is required to bring the circumstances (supported by a medical certificate or other evidence) to the notice of the Senior Administrative Officer not later than seven days after the date of the examination.

A student who believes that his performance at an examination has been affected by serious illness during the year or by other cause outside his control, and who desires these circumstances to be taken into consideration in determining his standing is required to bring the circumstances (supported by a medical certificate or other evidence) to the notice of the Senior Administrative Officer not later than seven days after the date of the examination.

All medical certificates should be as specific as possible concerning the severity and duration of the complaint and its effect on the student’s ability to take the examinations.

A student who attempts an examination, yet claims that his performance is prejudiced by sickness on the day of the examination, must notify the Senior Administrative Officer or Examination Supervisor before, during, or immediately after the examination, and may be required to submit to medical examination.

A student suffering from a physical disability which puts him at a disadvantage in written examinations may apply to the Senior Administrative Officer for special provision when examinations are taken. The student may be required to support his request with medical evidence.

All students will receive an enrolment details form by 30th June. It is not necessary to return this form unless any information recorded there is incorrect. Amended forms must be returned to the Examinations Branch by 19th July. Amendments notified after the closing date will
not be accepted unless exceptional circumstances exist and approval is obtained from the S.A.O. Where a late amendment is accepted, a late fee of $5 will be payable. Amended forms returned to the S.A.O. will be acknowledged in writing within fourteen days.

RULES AND PROCEDURE FOR THE CONDUCT OF EXAMINATIONS

(a) Candidates are required to obey any instruction given by an examination supervisor for the proper conduct of the examination.

(b) Candidates are required to be in their places in the examination room not less than ten minutes before the time for commencement.

(c) No bag, writing paper, blotting paper, manuscript or book, other than a specified aid, is to be brought into the examination room.

(d) No candidate shall be admitted to an examination after thirty minutes from the time of commencement of the examination.

(e) No candidate shall be permitted to leave the examination room before the expiry of thirty minutes from the time the examination commences.

(f) No candidate shall be re-admitted to the examination room after he has left it unless during the full period of his absence he has been under approved supervision.

(g) A candidate shall not by any improper means obtain, or endeavour to obtain, assistance in his work, give, or endeavour to give, assistance to any other candidate, or commit any breach of good order.

(h) Smoking is not permitted during the course of examinations.

(i) A candidate who commits any infringement of the rules governing examinations is liable to disqualification at the particular examination, to immediate expulsion from the examination room, and to such further penalty as may be determined in accordance with the By-Laws.
DEFERRED EXAMINATIONS

Deferred examinations may be granted in the following cases:

(i) When a student, through illness or some other acceptable circumstance, has been prevented from taking the annual examination or has been placed at a serious disadvantage during the annual examinations. Applications for deferred examination in this category must be lodged with the S.A.O. with appropriate evidence of the circumstances (e.g., medical certificate) not later than seven days after the examination concerned. All such applications shall be reported to the Head of the School responsible for the subject. Before a deferred examination is granted on medical grounds, regard shall be paid to the student’s class and assignment work in the subject, to his general performance in the year, and to the significance of the annual examination in compiling the composite mark.

(ii) To help resolve a doubt as to whether a student has reached the required standard in a subject.

(iii) To allow a student by further study to reach the required standard in a subject. The granting of a deferred examination in such cases will be based on the general quality of the student’s performance.

(iv) Where a student’s standing at the annual examinations is such that his progression or graduation could depend on his failure in one subject only, then his position in that subject shall be again reviewed with a view to determining whether a deferred examination may be granted notwithstanding his failure otherwise to qualify for such concession.

Deferred examinations must be taken at the centre in which the student is enrolled, unless he has been sent on compulsory industrial training to remote country centres or interstate. An application to take an examination away from the centre in which enrolled must be lodged with the Senior Administrative Officer immediately examination results are received. Normally, the student will be directed to the nearest University for the conduct of the deferred examination.

A student eligible to sit for a deferred examination must lodge with the Accountant an application accompanied by the fee of $5 per subject, by the date indicated on the notification of results.
APPLICATION FOR ADMISSION TO A DEGREE

Applications for admission to a degree of the University must be made on the appropriate form by 31st January. Applicants should ensure that they have completed all requirements for the degree, including industrial training where necessary.

RESTRICTION UPON STUDENTS RE-ENROLLING

The University Council has adopted the following rules governing re-enrolment with the object of requiring students with a record of failure to show cause why they should be allowed to re-enrol and retain valuable class places. These rules will be applied retrospectively from January, 1962.

(i) As from 1st January, 1962, a student shall show cause why he should be allowed to repeat a subject in which he has failed more than once. (Failure in a deferred examination as well as in the annual examination counts, for the purpose of this regulation, as one failure.) Where such subject is prescribed as a part of the student's course he shall be required to show cause why he should be allowed to continue the course. A student in the medical course shall show cause why he should be allowed to repeat the second year of the course if he has failed more than once to qualify for entry to the third year.

(ii) Notwithstanding the provisions of clause (i), a student shall be required to show cause why he should be allowed to continue a course which he will not be able to complete in the time set down in the following schedule:

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<th>Number of years in course</th>
<th>Total time allowed from first enrolment to completion (years)</th>
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*(iii) No full-time student shall, without showing cause, be per­mitted to continue a course unless all subjects of the first year of his course are completed by the end of his second year of attendance. No student in the Faculty of Arts shall, without showing cause, be permitted to continue a course unless he completes four subjects by the end of his second year of attendance.

No part-time student shall, without showing cause, be permitted to continue a course unless all subjects of the first two stages of his course are completed by the end of his fourth year of attendance and all subjects of the third and fourth stages of his course by the end of his seventh year of attendance.

No student in the Faculty of Medicine shall, without showing cause, be permitted to continue with the medical course unless he completes the second year of the course by the end of his third year of attendance, and the third year of the course by the end of his fourth year of attendance.

(iv) A student who has a record of failure in a course at another University shall be required to show cause why he should be admitted to this University. A student admitted to a course at this University following a record of failure at another University shall be required to show cause, notwithstanding any other provisions in these rules, why he should be permitted to continue in that course if he is unsuccessful in the annual examinations in his first year of attendance at this University.

(v) Any student excluded under any of the clauses (i)-(iii) may apply for re-admission after two academic years and such application shall be considered in the light of any evidence submitted by him.

(vi) A student wishing “to show cause” under these provisions shall do so in writing to the Senior Administrative Officer. Any such application shall be considered by the Professorial Board, which shall determine whether the cause shown is adequate to justify his being permitted to continue his course or re-enrol as the case may be.

*Rule (iii) in so far as it relates to students in the Faculty of Arts will apply retrospectively as from 1st January, 1967, and in so far as it relates to students in the Faculty of Medicine, will apply to students enrolling for the first time in 1967 or thereafter.
(vii) The Vice-Chancellor may on the recommendation of the Professorial Board exclude from attendance in a course or courses any student who has been excluded from attendance in any other course under the rules governing re-enrolment and whose record at the University demonstrates, in the opinion of the Board and the Vice-Chancellor, the student’s lack of fitness to pursue the course nominated.

(viii) A student who has failed, under the provisions of Clause (vi) of these rules, to show cause acceptable to the Professorial Board why he should be permitted to continue in his course, and who has subsequently been permitted to re-enrol in that course or to transfer to another course, shall also be required to show cause, notwithstanding any other provisions in these rules, why he should be permitted to continue in that course if he is unsuccessful in the annual examinations immediately following the first year of resumption or transfer of enrolment as the case may be.

(ix) A student may appeal to an Appeals Committee constituted by Council for this purpose, against his exclusion by the Professorial Board from any subject or course.

RE-ADMISSION AFTER EXCLUSION

Applications for re-admission must be made on the standard form and lodged with the Senior Administrative Officer not later than 30th June of the year prior to that for which re-admission is sought. An application should include evidence of appropriate study in the subjects (or equivalents) on account of which the applicant was excluded. In addition, evidence that the circumstances which were deemed to operate against satisfactory performance at the time of exclusion are no longer operative or are reduced in intensity, should be furnished. An applicant may be required to take the annual examinations in the relevant subjects as qualifying examinations in which case re-admission does not imply exemption from the subject.

It should be noted that a person under exclusion may not be enrolled in miscellaneous subjects unless he has received the approval of the Professorial Board.

Persons who intend applying for re-admission to the University at a future date may seek advice as to ways in which they may enhance their prospects of qualifying for re-admission. Enquiries should be made on
a form obtainable from, and lodged with the Senior Administrative Officer.

**OWNERSHIP OF STUDENTS' WORK**

The University reserves the right to retain at its own discretion the original or one copy of any drawings, models, designs, plans and specifications, essays, theses or other work executed by students as part of their courses, or submitted for any award or competition conducted by the University.

**NOTICES**

Official University notices are displayed on the notice boards and students are expected to be acquainted with the contents of those announcements which concern them.

**APPLICATION OF RULES**

*General*

Any student who requires information on the application of these rules or any service which the College offers, may make enquiries from the Senior Administrative Officer.

*Appeals*

Section 5(c) of Chapter III of the By-laws provides that “Any person affected by a decision of any member of the Professorial Board (other than the Vice-Chancellor) in respect of breach of discipline or misconduct may appeal to the Vice-Chancellor, and in the case of disciplinary action by the Vice-Chancellor, whether on appeal or otherwise, to the Council”.
Extra-Curricular Activities

This section provides brief details only of the extra-curricular activities which are open to students.

SPORTING FACILITIES

The College has constructed a sporting oval at the north-eastern end of its campus to provide first class facilities for the playing of various sports. A second class oval for cricket and football, hockey fields and tennis courts is available.

THE STUDENTS' UNION

The Students' Union is a body elected by and from the students to promote student welfare and interests. Membership of the Students' Union is compulsory for all students.

"Tertangala"—the journal of the Wollongong University College Students' Union is published at least once each term.

CLUBS AND SOCIETIES

All students are encouraged to participate in the activities of at least one of the various student Clubs and Societies. These clubs aim to promote the physical, social and educational development of students through their leisure time activities. The following clubs are recognised at this College:

- Arts Faculty Association
- Australian Reform League
- Car Club
- Chess Club
- Climbing Club
- Cricket Club
- Debating Society
- Drama Society
- Geological Society
- Historical Society
- Labour Club
- Liberal Club
- Liberal Arts Society
- National Union of Australian University Students
- Men's Hockey Club
- Metallurgical Society
- Motorbike Club
- Newman Society
- Orchestral Society
- Rugby Union Club
- Science Faculty Association
- Squash Club
- Student Christian Fellowship
- Tennis Club
- Women's Hockey Club
- Women Students' Society
- World University Service

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