

L.N. 4 of 1994

**EDUCATION ACT
(CAP. 327)**

**THE BACHELOR OF ENGINEERING (HONOURS)
— B.ENG. (HONS.) — DEGREE COURSE REGULATIONS, 1993**

IN exercise of the powers conferred upon him by sections 30 (5) and 31 (6) of the Education Act (Cap. 327), the Chancellor of the University of Malta has promulgated the following regulations made by the Senate of the University of Malta by virtue of the powers conferred upon it by section 35 of the said Act.

Citation

These regulations may be cited as The Bachelor of Engineering (Honours) — B.Eng. (Hons.) — Degree Course Regulations, 1993.

**THE BACHELOR OF ENGINEERING (HONOURS) — B. ENG. (HONS.)
— DEGREE COURSE REGULATIONS, 1993**

1. Admission to the B. Eng. (Hons.) Degree Course

(1) To qualify for the conferment of the Degree of Bachelor of Engineering (Honours) — B. Eng. (Hons.), a candidate must have:

(a) been admitted to the University as a regular student in accordance with the Admission Regulations and, in addition, satisfied the Special Entry Requirements set out in subparagraphs (a) or (b) or (c) of paragraph (2) or is admitted to the Course under paragraph (3) of these regulations;

(b) completed the course of studies and qualified in the examinations in accordance with these regulations; and

(c) satisfied all other requirements set out in these regulations and any other relevant statutes, regulations or bye-laws of the University of Malta.

(2) Subject to the provisions of paragraph (3) of this regulation the Special Entry Requirements for the Course shall be as follows:

(a) two passes at Advanced Level, at Grade C or better in Mathematics and Physics and a pass in a third subject at Advanced Level from the list of approved subjects (preferably another Mathematics option, Engineering Drawing, Chemistry, Computer Studies, Electronics or Economics) in the Matriculation Examination of the University or at corresponding levels of other examinations recognised by Senate for the purposes of the Admission Regulations, provided that any of the following may be offered instead of the third "A" Level subject:

(i) the full Technological Certificate of the City and Guilds of London Institute, Courses No. 255, 271, 281 or 803; or

(ii) the Certificate in Industrial Electronics of the Fellenberg Training Centre; or

(iii) an Ordinary Technician Diploma of the City and Guilds of London Institute Course No. 800 in Mechanical and Electrical Engineering; or

(b) a Higher Technical Diploma of the City and Guilds of the London Institute Course No. 800 in Electrical Engineering and a pass at Advanced Level in Physics at Grade C or better in the Matriculation Examination of the University or at corresponding level of other examinations recognised by Senate for the purposes of the Admission Regulations; or

(c) A Higher Technical Diploma of the City and Guilds of the London Institute Course No. 800 in Mechanical Engineering and a pass at Advanced Level in Mathematics at Grade C or better in the Matriculation Examination of the University or at corresponding level of other examinations recognised by Senate for the purposes of the Admission Regulations.

(3) A candidate who is a graduate of a university or has other qualifications considered sufficient, may be exempted by the Admissions Board, on the advice of the Faculty Admissions Committee, from the whole or part of these Special Course Requirements.

2. Duration and Structure of Course

(1) The Course shall extend over a period of four years and shall lead, subject as hereinafter provided, to the award of the B. Eng. (Hons.) Degree in either Electrical Engineering or Mechanical Engineering.

(2) Each year shall comprise two semesters of study followed by thirteen weeks of industrial training except in the Final Year.

(3) Candidates shall opt for Electrical or Mechanical Engineering by the end of the first semester of the First Year of the Course.

(4) Candidates shall undertake industrial training as approved by the Faculty Board.

3. Course Modules

(1) In the First Year candidates shall be required to complete satisfactorily approved modules in the following:

- (a) Mathematics
- (b) Computer Engineering
- (c) Signals and Networks
- (d) Electronics
- (e) Electrical Power
- (f) Materials Science and Physical Electronics
- (g) Applied Mechanics
- (h) Thermodynamics and Fluid Mechanics
- (i) Engineering Drawing and Design
- (j) Metrology and Instrumentation
- (k) Technical and Social Communications

(2) In the Second Year candidates shall be required to complete satisfactorily approved modules in the following:

(a) Electrical Engineering

- (i) Mathematics
- (ii) Field and Circuit Theory
- (iii) Control Systems
- (iv) Business Studies
- (v) Electronics
- (vi) Microprocessor Systems
- (vii) Electrical and Electronic Materials
- (viii) Communications
- (ix) Electrical Power and Machines

(b) Mechanical Engineering

- (i) Mathematics
- (ii) Materials Science
- (iii) Computing
- (iv) Engineering Thermodynamics
- (v) Fluid Mechanics
- (vi) Mechanics of Machines
- (vii) Manufacturing Technology
- (viii) Electronic Technology
- (ix) Business Studies
- (x) Mechanics of Materials

(3) In the Third Year candidates shall be required to complete satisfactorily approved modules in the following:

(a) Electrical Engineering

- (i) Mathematics
- (ii) Electronics
- (iii) Business Studies

and in FOUR modules chosen from:

- (i) Control Systems
- (ii) Computer Systems
- (iii) Software Engineering
- (iv) Communications
- (v) Industrial Power Systems
- (vi) Electromechanical Plant

(b) Mechanical Engineering

- (i) Mathematics
- (ii) Engineering Thermodynamics
- (iii) Fluid Mechanics
- (iv) Mechanics of Materials & Structures
- (v) Mechanics of Machines
- (vi) Production Technology
- (vii) Manufacturing & Metallurgical Processes
- (viii) Business Studies

- (ix) Engineering Design Modules comprising:
Materials Selection, Power Transmission, Bearing Technology,
Mechanisms, Theory of Design, Computer Aided Design.
- (x) An Engineering Design Project.

(4) In the Fourth Year candidates shall be required to complete satisfactorily approved modules in the following:

(a) Electrical Engineering

- (i) Industrial Management
- (ii) Electronics
- (iii) Mathematics

and in THREE modules chosen from:

- (i) Computer Communications
- (ii) Software Technology
- (iii) Control Engineering
- (iv) Electrical Power Engineering
- (v) Electrical Energy Utilization
- (vi) Communications

(b) Mechanical Engineering

- (i) Flexible Manufacturing Systems
- (ii) Engineering Dynamics and Control
- (iii) Advanced Mechanics of Materials
- (iv) Engineering Thermodynamics
- (v) Operational Research
- (vi) Industrial Management

(5) In the Fourth Year candidates shall also undertake a project approved by the Board of Studies and submit a dissertation on the project not later than a date fixed by the Head of Department concerned.

(6) Optional modules may be changed by the Faculty Board with the approval of Senate in order to reflect advances made in Technology. The list of these modules shall be published by the Faculty Board prior to the commencement of each academic year.

4. Examinations and Course Assessments

(1) Except in the Third Year of the Mechanical Engineering option, all examinations shall normally be held during May/June and resit examinations shall be held before the end of September.

(2) The Third Year of the Mechanical Engineering option sessional examinations shall be held during April. The examination of the Engineering Design Project and all resit examinations shall be held before the end of September.

(3) There shall be Boards of Examiners for each year of the Course to conduct and assess examinations. Examination papers for the Third Year examinations shall be moderated by external examiners. The Examination Boards for the Fourth Year examination shall include external examiners.

(4) Assessment of performance of candidates during each academic year shall be made by means of coursework assessment and examinations. A candidate shall complete successfully the appropriate coursework and examination requirements for the year before he is allowed to proceed to the following year of the Course.

(5) Except in the Fourth Year of the Course a candidate who fails in not more than two modules in any one year shall be allowed to resit those modules during the resit examinations of that year. Only the minimum pass mark shall be recorded in passed resit modules' examinations.

(6) A candidate who in the Fourth Year of the Course fails in not more than two modules shall be required to undertake a *viva voce* examination. If successful, the Degree classification awarded to such a candidate shall not be higher than Third Class Honours. If the candidate fails in the *viva voce* examination he shall be required to repeat the year.

(7) A candidate who fails in more than two modules in any one year shall repeat the year.

(8) Only one repeat year shall be allowed throughout the whole Course. Failure at a resit examination of a repeat year shall require a candidate to withdraw from the course.

(9) A candidate who repeats either the First or the Second Year of his Course shall carry the marks obtained during the repeat year except those in which he had failed in the previous year. For these, if he passes, he shall be awarded minimum pass marks.

(10) A candidate who repeats either the Third or Fourth Year before completing the Course successfully shall be considered only for a Pass Degree (B. Eng.).

(11) In each year, the results obtained by candidates in each subject shall be published in alphabetical order in one of the grades A, B, C, D, E and F, A being the highest and E the lowest pass grade. The grades shall take into account performance in examinations and course work.

5. Degree Results

(1) The performance of candidates during the First, Second, Third and Fourth Years of the Course and at sessional examinations shall be reviewed by a Board, made up of the Dean of the Faculty, the Heads of Department, the External Examiner and the Academic Staff of the Department, for the purpose of Degree award recommendations to the Faculty Board.

(2) The Board constituted under the preceding paragraph shall establish its own procedures to arrive at its recommendations to the Faculty Board. These procedures shall be made known in a report to the Faculty Board attached to the Degree Classification list of candidates.

(3) The Final Classification of the Degree for every successful candidate shall be based on the results obtained in each year of the Course.

(4) The Bachelor of Engineering (Honours) — B. Eng. (Hons.) — Degree shall be awarded according to the following classification:

First Class Honours
Second Class Honours (Upper Division)
Second Class Honours (Lower Division)
Third Class Honours.

(5) A Pass Degree of Bachelor of Engineering — B. Eng. — shall be awarded to a candidate who, in the opinion of the Board constituted under paragraph (1) of this regulation and of the Faculty Board, has satisfied the Board of Examiners in each year of the Course but has not achieved the appropriate level of qualifications for Honours.

6. **Applicability**

These regulations shall be applicable to courses commencing in October 1988 or later.