

Degree of the Bachelor of the Science of Engineering Honours
By-law No. 42 - 2024

University of Ruhuna

By-law made by the Council of the University of Ruhuna on under Section 135 of the Universities Act. No. 16 of 1978, and amendments thereof.

BY- LAW

This By-law may be cited as the Bachelor of the Science of Engineering Honours By-law No. 42-2024 of the University of Ruhuna and shall come into effect on 13.03.2023.

This By-law applies to the Bachelor of the Science of Engineering Honours degree programme, offering specializations in Civil and Environmental Engineering, Electrical and Information Engineering, Mechanical and Manufacturing Engineering, and Computer Engineering. Any differences among the specialization areas are explicitly mentioned at relevant places.

1.0 General Requirements for Award of the Degree

1.1 The Degree of the Bachelor of the Science of Engineering Honours hereinafter referred to as "the degree" shall be awarded by the University of Ruhuna, Sri Lanka, hereinafter referred to as "the University" to a student who:

- a) has been admitted to the University as a student under section 135 of Universities Act No. 16 of 1978 and amendments thereof, and
- b) has been duly registered at the University, during the period of study prescribed by this By-law, and
- c) has completed the courses of study, to the satisfaction of the Senate, as prescribed by this By-law and Rules and Regulations made thereunder, and
- d) has passed examinations as prescribed by this By-law and Regulations made thereunder, and
- e) has paid such fees as prescribed for his/her case by this By-law and the Regulations of the University, and
- f) has fulfilled all the above requirements within eight academic years from the date of enrolment for the academic programme of the University, provided that it shall be within the power of the Senate to declare for some specified reason(s) that a student is eligible for the award of the Degree on a subsequent occasion, and
- g) has no on-going disciplinary inquiry conducted by the University, and
- h) has no on-going inquiry conducted by the University on examination offences.

1.2 The Degree shall be conferred on candidates, qualified as in Section 1.1, as prescribed by the Regulations made by the Senate.

1.3 The abbreviation of the name of the Degree shall be BScHonsEng.

2.0 Programme of Study

- 2.1 The programme of study leading to the BScEngHons degree consists of a common core course extending over the first two semesters, and a specialisation course extending over the next six semesters.
- 2.2 In the Common Core Course, a student shall take all Core Modules prescribed by the Senate. In the specialisation course, a student, in addition to all Core Modules prescribed for the major field of specialisation, shall choose Technical Elective (TE) and General Elective (GE) modules as prescribed by the Senate to satisfy the requirements.
- 2.3 The programme of study shall be for a period of not less than four academic years including the period of Industrial Training and Development Programme as prescribed by the Senate.
- 2.4 Each academic year will normally consist of two semesters as prescribed in the Regulations under this by-law.
- 2.5 A student shall complete a specified period of Industrial Training, at such Institutions/ Organizations as may be specified by the Coordinator, Engineering Education Centre of the Faculty of Engineering.
- 2.6 The fields of specialisation and the relevant course modules shall be as laid down by the Senate.
- 2.7 The syllabus for each course module, mode of evaluation, examination criteria, and scheme of award of classes shall be prescribed by the Senate on the recommendations of the Faculty Board.
- 2.8 The credit distribution for Core modules, Technical Elective (TE) modules, General Elective (GE) modules and Industrial training for each degree program is indicated below.

Module type	Minimum Credit Requirement			
	Civil and Environmental Engineering	Electrical and Information Engineering	Mechanical and Manufacturing Engineering	Computer Engineering
Core Modules	130	116	127	115
Technical/General Elective Modules	14	28	17	29
Industrial Training	6	6	6	6

3.0 Registration for the Degree Programme/ Course Modules

- 3.1 A student selected for admission to the degree programme in the Faculty of Engineering,

- a) must satisfy the general University admission requirements for Faculties of Engineering as laid down by the University Grants Commission, Sri Lanka, and
 - b) must have been selected according to the stipulated University Admission Criteria.
- 3.2 Applicants with foreign qualifications referred for admission by the University Grants Commission shall be admitted only with the consent of the Faculty Board.
- 3.3 A student selected for admission shall register to follow the Common Core Course (Semesters 1 and 2) of the Degree Programme. Such registration shall be carried out as prescribed by the Senate.
- 3.4 Eligibility for registration for the subsequent Semesters of the programme shall be determined in accordance with the Section 4.2 and Section 7.3 of the Regulations as laid down by the Senate.
- 3.5 Prescribed fees payable for registration, examinations, and course fee wherever relevant shall be as determined by the Council of the University hereinafter referred to as “the Council”.
- 3.6 A student admitted to the Degree Programme shall not be permitted concurrent registration for any other fulltime course of study, not permitted to register, or appear for any external examination without the prior consent of the Senate.

4.0 Evaluation

- 4.1 The performance of a student shall be evaluated for each course module as prescribed by the Senate on the recommendation of the Faculty Board subject to eligibility requirements stipulated in the Regulations.
- 4.2 The continuous assessment component may include marks from one or more of the following: class participation, marked assignments, laboratory/field reports, designs, work camp(s), projects, seminars, presentations, demonstrations, oral examinations, and in-class assessments.
- 4.3 The mode of assessment and the distribution of weight between continuous assessment and end-of-semester examination for each module shall be determined by the Senate on the recommendation of the Faculty Board.
- 4.4 An outline of the module, class activities, assignments, examinations, and weights assigned shall be announced to the students by the Coordinator/Lecturer-in-charge at the commencement of the module.
- 4.5 A Board of Examiners shall consider the performance of the candidate based on the assessment made by the examiners/moderators at the end of each semester and shall make recommendation to the Senate.
- 4.6 A student's registration for modules of a Semester shall be considered as the registration for examination of modules in the Semester.

4.7 A repeater is a student who has previously attempted a module and did not achieve a passing grade, and desires to retake the exam. An application to appear for an examination as a repeater shall be made prior to prescribed dates and shall be accompanied by the prescribed examination fees.

4.8 In the case of illness or other acceptable reason, a student may be permitted to withdraw from an examination as per conditions laid down by the Senate.

5.0 Eligibility to Sit for Examinations

5.1 The minimum of 80% attendance in the proper attempt for theory classes, and completion of all laboratory sessions/field sessions/design sessions/work camp(s)/project(s) is required for a student to be eligible to appear for the end semester examination(s) of the relevant course module. In case of Industrial Training, attendance is required as prescribed in the Industrial Training Manual.

5.2 If a student is not eligible to sit for the end exam, he/she may appeal to the Dean of the Faculty of Engineering to request eligibility. In such instances, the student must submit an appeal along with supporting documents. If the appeal is approved by the Faculty Board, the student may be granted permission to sit for the examination.

6.0 Allocation of Grades

6.1 The evaluation of a Core module, a Technical Elective (TE) module and a General Elective (GE) module which is counted for Grade Point Average (GPA) shall be expressed by a letter grade on a 4.0 grading scale according to given marks range as described below.

Marks Range	Grade	Grade Point	Notes
85 - 100	A+	4.0	1
75 - 84	A	4.0	
70 - 74	A-	3.7	
65 - 69	B+	3.3	
60 - 64	B	3.0	
55 - 59	B-	2.7	
50 - 54	C+	2.3	
45 - 49	C	2.0	2
40 - 44	C-	1.7	3
0 - 39	E	0.0	4,5

Grade	Reason	Note
MC	Academic Concession for medical reasons	6
AC	Academic Concession other reasons except medicals	7
WH	Results Withheld	8

Notes:

1. Grade A+ signifies outstanding performance.
2. Grade C or above is the normal requirement to pass a module.
3. Grade C- is a conditional pass grade and is counted in the calculation of the Semester Grade Point Average (SGPA), and Cumulative Grade Point Average (CGPA). In the proper attempt, students can earn credits for C- grades only if he/she has achieved a SGPA of 2.00 or above and has, in that semester, no more than three grades at the level of C- or below. In the repeat attempts, students can not earn credits for C- grades. A student may improve a grade C- to the highest possible grade of C by repeating the module. Grade C and above cannot be improved by repeating the module.
4. Grade E signifies failure in the module. In order to complete the module, a student shall repeat the module. The grade is counted in the calculation of the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).
5. The Continuous Assessment marks shall be carried forward up to maximum of two consecutive years and shall only be replaced with an improvement by reattempting. Improved Continuous Assessment marks shall be eligible for the improvement of overall grade to highest possible grade of C.
6. Grade MC signifies Academic Concession for medical reasons which enables the student to repeat the module as the first attempt. In such case, SGPA will not be calculated.
7. Grade AC signifies Academic Concession other reasons except medicals considered under Note 6 which enables the student to repeat the module as the first attempt. In such case, SGPA will not be calculated.
8. Grade WH signifies Results Withheld. In such a case, SGPA will not be calculated.

6.2 General Elective (GE) modules may or may not be counted towards GPA. Those GE modules that are not evaluated based on the Four Point Grading System as in section 6.1, and Industrial Training are not counted towards GPA. Upon successful completion of each of these modules, a grade 'H' indicating an Excellent Achievement, a grade 'M' indicating a Good Achievement, or a grade 'S' indicating a Satisfactory Achievement is awarded according to the given marks range as shown below. A student who receives a fail grade 'F' may improve it to a grade 'S' by repeating the module. The grades MC, AC or WH may also be assigned to these modules.

Marks Range	Grade	Description
75 - 100	H	Excellent
60 - 74	M	Good
45 - 59	S	Satisfactory
0 - 44	F	Fail

6.3 A student who has missed any continuous assessment component due to illness or other acceptable reasons may appeal, providing supporting documents, to the module coordinator within one week from the date of the assessment. Documents supporting his/her claim should be submitted as stated in the approved Regulations under this by-law.

- 6.4 A student who has missed an end-of-semester examination because of illness or other acceptable reason may appeal with supporting documents to the Dean for an Academic Concession within one week from the date of reporting to the faculty after medical leave. An Academic Concession (grade MC or AC) shall require the approval of the Faculty Board. Documents supporting his/her claim for an Academic Concession should be submitted as stated in the approved Regulations under this By-law.
- 6.5 The highest grade obtainable at a repeat attempt is the grade C (or the grade S as the case may be) except when an Academic Concession has been granted. Every grade shall be entered on the student's permanent record. The grade at the first attempt and the improved grade earned at a subsequent attempt, if any, shall be recorded alongside the number of attempts for each module.
- 6.6 The Grade Point Average (GPA) is calculated at the end of the student's study programme in the faculty, by considering all the core modules, Technical Elective (TE) modules and General Elective (GE) modules which are counted for GPA, as follows. If the number of Technical Elective and General Elective (counted for GPA) modules completed by a student exceeds the requisite number, the excessive number of modules is selected and removed in GPA calculation to maximize the GPA.

$$GPA = \frac{\sum_{i=1}^n w_i C_i GPV_i}{\sum_{i=1}^n w_i C_i}$$

where

$$w_i = \begin{cases} 0.05 & \text{for } i^{th} \text{ module in semesters 1, 2} \\ 0.15 & i^{th} \text{ module in for semesters 3, 4, 5, 6, 7, 8} \end{cases}$$

n is the number of modules with an earned GPA up to the time of calculation

C_i is the number of credits allocated to i^{th} module,

GPV_i is the Grade Point Value earned for the i^{th} module.

The semester Grade Point Average (SGPA) of the j^{th} semester, calculated as

$$SGPA_j = \frac{\sum_{i=1}^n C_i GPV_i}{\sum_{i=1}^n C_i}$$

n is the number of registered modules counted for GPA in the j^{th} semester

C_i is the number of credits allocated to i^{th} module of j^{th} semester

GPV_i is the Grade Point Value earned for the i^{th} module of j^{th} semester

The Cumulative Grade Point Average (CGPA) is calculated based on the summation of Grade Point Values earned for all modules registered for credits, up to the time of calculation, weighted according to the number of credits and module weight as follows.

$$CGPA = \frac{\sum_{i=1}^n w_i C_i GPV_i}{\sum_{i=1}^n w_i C_i}$$

where

n is the number of modules with an earned GPA up to the time of calculation,

C_i is the number of credits allocated to i^{th} module,

$$w_i = \begin{cases} 0.05 \text{ weight for } i^{th} \text{ module in semesters 1, 2} \\ 0.15 \text{ weight for } i^{th} \text{ module in semesters 3, 4, 5, 6, 7, 8} \end{cases}$$

GPV_i is the Grade Point value earned for the i^{th} module.

GPA, SGPA, and CGPA shall be calculated up to the nearest second decimal. point.

7.0 Requirement for Graduation

A candidate to be admitted to the degree of the Bachelor of the Science of Engineering Honours (BScEngHons) shall satisfy the following requirements:

- A minimum total of 150 credits that comprise of all the Core modules, Technical Elective (TE) modules, General Elective (GE) modules and Industrial Training, satisfying the conditions in Sections 6.1 and 6.2 as relevant.
- Technical Elective (TE) modules and General Elective (GE) modules must be chosen from the list offered by the relevant Department satisfying the accreditation requirements for an engineering degree as specified by the Institution of Engineers Sri Lanka (IESL).
- Completion of the Developmental Programme, Industrial Training, English Language Proficiency Test, and any other mandatory requirements prescribed by the Faculty Board with the approval of the Senate.
- A residence requirement of four academic years as a duly registered full-time student of the University.
- A minimum Grade Point Average (GPA) of 2.00 at the time of eligible for graduation.

8.0 Award of Classes

8.1 A student shall be deemed to be eligible for the award of the degree of BScEngHons with a class on satisfying the Grade Point Average (GPA) not less than 3.00 and completion of all programme requirements to the satisfaction of the Senate within a period of four academic years from the date of commencement of the programme of study.

8.2 The award of BScEngHons with a class shall be according to the Grade Point Average values stipulated below;

GPA	Class Awarded
$GPA \geq 3.70$	First Class
$3.30 \leq GPA < 3.70$	Second Class Upper Division
$3.00 \leq GPA < 3.30$	Second Class Lower Division

8.3 A candidate who has not satisfied the eligibility requirements for a class stated under section 8.1 shall be deemed to be eligible for the award of the degree of BScEngHons on satisfying the minimum graduation requirements stated under 7(a) to 7(e).

8.4 A candidate who satisfies the GPA requirement for a Class but takes longer than four academic years to complete the programme requirements may be deemed to be eligible

for the award of a BScEngHons degree with a Class as decided by the Senate on the recommendation of the Faculty Board under extenuating circumstances.

8.5 Notwithstanding the above provisions, individual cases may be dealt with on the basis of their own merits by the Faculty Board with the approval of the Senate on the recommendation of the Board of Examiners.

9.0 Award of the Degree

A student shall be eligible for the conferment of the degree in Bachelor of the Science of Engineering Honours after the successful completion of all the stipulated requirements in section 7 within a maximum period of eight academic years from the date of the first registration to the faculty.

10.0 Effective Date of the Degree

10.1 The effective date of the degree shall be the date following the last day of the final evaluation conducted by the faculty when the student fulfils all the requirements for graduation.

10.2 In case a student has an ongoing inquiry for an examination or disciplinary offenses conducted against him/her by the University, results of the relevant examination/s shall not be released until the inquiry is completed. In such situations, the effective date of the degree shall be determined by the Senate.

11.0 Revision of By-law/ Regulations

11.1 Regulations under this By-law may be revised/amended by the Senate as and when necessary.

11.2 All other common Rules and Regulations applicable to Universities in Sri Lanka and to the University of Ruhuna in particular are also applicable to students registered for this degree programme.

11.3 This By-law may be revised/amended as and when necessary.

12.0 Interpretations

12.1 In this By-law unless the context otherwise requires:

"University" means the "University of Ruhuna, Sri Lanka" as established by the Gazette Notification No. 281/07 dated 24-01-1984.

"Council" means "the Council of the University of Ruhuna", constituted by the Universities Act No.16 of 1978 and amendments thereof.

"Senate" means "the Senate of the University of Ruhuna", constituted by the Universities Act No. 16 of 1978 and amendments thereof.

"Faculty of Engineering" or "Faculty" means "the Faculty of Engineering, University of Ruhuna".

"Faculty Board" means "the Faculty Board of the Faculty of Engineering, University of Ruhuna".

"Dean" means "the Dean of the Faculty of Engineering, University of Ruhuna".

"Head of the Department" means "the Head of the Department of Study" where the student is enrolled.

- 12.2 Any question regarding the interpretation of this By-law shall be referred to the Council whose decision thereon shall be final and conclusive.