The Open University of Sri Lanka
Faculty of Engineering Technology

Student Guidebook
2023 / 2024

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Faculty of Engineering Technology
The Open University of Sri Lanka
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"The mission of the Faculty of Engineering Technology is to provide lifelong learning opportunities in Engineering and Technology for all to meet industrial and social needs through open and distance learning, and support research & scholarship by efficient & sustainable use of resources."

Message from the Dean

On behalf of the Faculty of Engineering Technology, I warmly welcome you.

The Mission of the Open University of Sri Lanka is to provide lifelong learning opportunities through Open, Distance and Flexible Education with a commitment to excellence in teaching and research. The full-time graduate and postgraduate degree programmes offered by the Faculty of Engineering Technology are conducted in English. They allow you the flexibility to learn at a pace comfortable to you. Learners are expected to complete their studies within three times the minimum duration stipulated in this guidebook.

The Bachelor of Science Honours in Engineering [BScHons (Eng)] degree programme is offered in the specialisations of Agricultural and Plantation Engineering, Civil, Mechanical, Mechatronics, Electrical, Computer, Electronics and Telecommunication, and Textile and Clothing Engineering. Bachelor of Industrial Studies Honours (BISHons) study programme is offered in Agriculture, Apparel Production and Management, Fashion Design and Product Development, and Textile Manufacture, and Software Engineering. The Bachelor of Software Engineering Honours (BSE Hons) Programme is conducted by the Centre for Information Technology Education Services (CITES).

Learners enrolled in the BScHons (Eng) programme can exit with a Higher Diploma in Technology in the relevant specialisation, having fulfilled the requirements for the award. The faculty also offers an Advanced Certificate programme in Apparel Technology. Learners are allowed to take a maximum of 18 course credits as Stand Alone, disregarding their pre-requisites, without enrolling in a programme of study.

Learners entering the BScHons (Eng) Programme require at least three (3) passes in the Mathematics Stream of the GCE Advanced Level Examination, in one and the same sitting. Learners enrolling in the BIS Hons programme (other than Agriculture) requires three (3) passes at the GCE Advanced Level Examination, obtained in one and the same sitting. Learners could enter either programmes of study by successfully completing the Advanced Certificate in Science Programme, or by producing an equivalent or a higher qualification acceptable to the University's Senate. The faculty recognises your prior learning and grants exemptions from courses up to a fifty per cent (50%) of course credits required for an award. These include courses in several nationally recognised certificate and diploma level programmes. This guidebook lists such qualifications that are evaluated to grant exemptions. Learners can request the faculty to evaluate any other qualifications by forwarding an application within the period stipulated in this guidebook.

The programmes offered by the faculty are recognised by the University Grants Commission and are designed to meet the requirements stipulated in the Sri Lanka Qualification Framework (SLQF). At present, our BSc Hons (Eng) programme is being re-evaluated by the Institution of Engineers Sri Lanka (IESL), for its recognition. The Institution of Engineers Sri Lanka provides a carrier path to become a Chartered Engineer, and to apply for its Associate Membership, a graduate requires a minimum 2Cs and an S pass at the GCE Advanced Level Examination, in the Mathematics Stream, obtained in one and the same sitting.

The faculty offers a one-year master's degree programme in Energy Management and a two-year Master of Science programme in Structural Engineering. The Open University also enrols learners to Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) degrees.

The faculty offers its programmes of study in the Open Distance Learning (ODL) mode and the academic coordination is done by competent permanent academics and visiting academics from the industry. Learners are encouraged to visit the main campus, regional and study centres to use library facilities, meet members of academic staff and peers, and to attend compulsory face-to-face sessions such as laboratory classes, presentations, and field work. We also advise learners to be employed in the relevant industry during the learning period.

The faculty uses the Learning Management System (LMS) MOODLE to facilitate online access to all courses. Practicing Self Learning, learning in study groups (i.e., Collaborative Learning) and timely completion of learning activities are important to ensure your success. The main mode of course delivery is through Self Instructional Course Material. The teachers provide you with feedback and necessary guidance to move forward. Learners are required to attend the Day Schools that are a few face-to-face interactive sessions held during the academic year, conducted via an online platform.

At the commencement of studies, learners are required to complete the following two courses:

English for General Academic Purposes (EGAP)

Empowering for Independent Learning (EfIL)

Both these courses are planned to be offered online via LMS MOODLE with online interactive discussion sessions.

We hope that you will find learning at the Faculty of Engineering Technology enjoyable and challenging in realising your ambitions in higher education. We take this opportunity to wish you the very best in your future endeavours.

Dr H.G.P.A. Ratnaweera

Dean, Faculty of Engineering Technology

Time schedule for student registration

Bachelor of Science Honours in Engineering, Bachelor of Industrial Studies Honours, Advanced Certificate in Apparel Technology, Stand Alone courses, and Postgraduate Study Programmes		
Type of Registration	**Centres**	**Dates**
New-Registration	All Centres	2023 November 16, 17, 18, & December 11, 12
	Colombo Regional Centre (CRC)	2023 November 13, 16, 17, 18, & December 11, 12
Add/ Drop period	CRC	2024 April 29, 30 & May 03
Drop dates	All Centres	2024 May 21

Important Dates

Activity	Centres	Date
Last date for submitting non approved qualifications for evaluation	Submit online to the Faculty email (engreg@ousl.lk) or handover documents to the Faculty of Engineering, OUSL. (Relevant documents are available at the Faculty of Engineering website)	2023 November 01

On-line submission of applications

Applicants should submit applications on-line by visiting the university website https://reginfo.ou.ac.lk/applyonline

Relevant payment could be made online through Debit/Credit cards or at the Centres.

Content

Section 1: General Information

1.1 The University

Established in 1980 under the Universities Act No. 16 of 1978, the Open University of Sri Lanka (OUSL) is the only recognised national university in Sri Lanka where students may pursue higher education by distance education techniques in keeping with the philosophy of Open and Distance Learning.

With the OUSL Ordinance No. 1 of 1990, of the Universities Act of Sri Lanka as amended, the OUSL has the same legal and academic status as any other national university in Sri Lanka. As per the Public Administration Circular No. 16/92, dated 13/03/1992, issued by the Ministry of Public Administration, Provincial Councils and Home Affairs, the degrees awarded by the OUSL are treated as equivalent to degrees awarded by other national universities under the purview of the University Grants Commission (UGC) of Sri Lanka.

The OUSL offers its own programmes of study leading to Certificates, Advanced Certificates, Diplomas, Higher Diplomas, Degrees, Honours Degrees, Postgraduate Diplomas and Masters Degrees, through regular academic programmes. In addition to these academic programmes, individual courses are offered as Stand Alone Courses for interested students. The OUSL is also fully equipped to support postgraduate research studies leading to Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) degrees.

1.2 Faculty of Engineering Technology

The Faculty of Engineering Technology is one of the six academic faculties of the OUSL. The other five faculties are the Faculty of Natural Sciences, the Faculty of Humanities and Social Sciences, the Faculty of Education, the Faculty of Health Sciences, and Faculty of Management Studies.

The administrative and academic head of the faculty is the Dean. The faculty consists of the following six Academic Departments.

- Agricultural and Plantation Engineering
- Civil Engineering
- Electrical and Computer Engineering
- Mathematics and Philosophy of Engineering
- Mechanical Engineering
- Textile and Apparel Technology

The Faculty Board of the Faculty of Engineering Technology regulates all academic activities in the faculty under the direction of the Senate of the OUSL. The faculty also has a multi-disciplinary Engineering Research Unit (ERU) dedicated to enhance research in the Faculty and to provide a forum for discussion of matters pertaining to Engineering research.

This student guidebook describes the study programmes offered by the faculty, which have been revised according to the Sri Lanka Qualification Framework and to fulfil professional accreditation requirements.

1.3 The Study System

The study system adopted by the Open University of Sri Lanka is based on multimedia instructional materials with a strong emphasis on Distance Education techniques using printed course material, online learning facilities and audio-visual aids. The Faculty of Engineering Technology is one of the pioneers, among

all academic institutions in the world, in the delivery of engineering degree oriented study programmes in distance education mode.

Course Components

The central component of Distant Education is the printed course material that offers the student the equivalent to lectures in a conventional university. Printed course material is supplemented by audio-visual material, online classes, face to face discussions/clarification classes (Day-Schools), tutor clinics, laboratory work, fieldwork, case studies, mini projects and seminars. Laboratory work and fieldwork form an integral part of many courses in engineering and are compulsory. Pre-scheduled Day-Schools are conducted by the academic staff members for groups of students at Regional/Study centres of the university or online. As most of the programmes are offered in English medium, an acceptable level of fluency in English is expected from our students.

The OUSL is meant primarily for working students. Therefore, it is possible for a student to study while working, without much difficulty. Those students who have passed GCE (A/L) in the relevant streams may join the Honours Degree programmes directly. Others will be required to first follow foundation programmes offered by the University.

Activity Schedule

All students are provided with an Activity Schedule before the starting the regular academic work of a study programme for an Academic Year. This gives dates, times and venues of all activities conducted for all the courses in the academic year together with the assessment criteria for each course. In addition, contact information of the Academic Coordinators and Course Coordinators of the courses are included in the Activity Schedule, available online. While the University is making every effort to schedule as many activities as possible during weekends and public holidays, to facilitate working students, certain activities such as laboratory classes

and examinations may have to be scheduled during weekdays. Since the Activity Schedule for the whole year is given to the student at the beginning of the academic year, it is hoped that plans could be laid out well in advance.

Enrolling for a Study Programme

A student who joins the OUSL for a particular programme by fulfilling Entry requirements is required to register for at least eight Credits of courses in the programme at the first registration. To register for a particular course, the student should have fulfilled the given Prerequisites for that course. Students are allowed to change their selection of courses after going through the study material, during the subsequent Add/Drop Period without any penalty. From the last date of Add/Drop period, for a further one-month students can withdraw from the courses which they are unable to handle. In this event, part of the fees already charged will be forfeited.

Assessment

Assessment of courses consists of two components, namely Continuous Assessment (CA) and Final Examination (FE). Continuous assessment is not merely a means of assessment; it is one of the significant means of facilitating learning. Activities such as laboratory work, field classes, tutor marked assignments (TMAs), presentations (PRE), mini projects (MP) and continuous assessment tests (CATs) and design projects (DP) are integral parts of learning and assessment.

A student is required to obtain a minimum of 40% marks as the Overall Continuous Assessment Mark (OCAM) for a particular course to gain eligibility to sit the Final Examination of that course. The OCAM is computed by combining the marks obtained for different CA components according to a pre-determined criterion. If this minimum mark is not obtained, the student is considered to have failed in that course and has to re-register in a subsequent year by re-paying the tuition fee. In this event, the student can obtain only a simple pass (C grade) for the course after successful completion. Therefore, it is strongly recommended that a student only register for the volume of courses which could be individually handled within the time available in a particular academic year.

A student gaining more than 40% OCAM in a particular course becomes eligible and is expected to sit the final examination in the same academic year (after applying). However, facing the final examination may be postponed to following year if necessary, within the validity period of 2 academic years including the year the student passed Continuous Assessment.

Therefore, the student must effectively involve in continuous learning throughout the academic year. Since a fair proportion of the activities used to impart knowledge in distance education involve self-study, success is only possible based on motivation and commitment.

Final mark of any course depends on the performance at both Continuous Assessment and Final Examination. For the courses offered by the Faculty, these components carry equal weightage.

A student who obtains the minimum OCAM for a course but fails to obtain the minimum pass mark at the final examination will be considered as a re-sit (RE) student. Re-sit students are not required to re-register for that particular course but should sit and pass the Final examination in the following academic year. A Re-sit student can obtain only a C grade for the particular course. A student who has obtained the minimum OCAM for a particular course may postpone sitting the final examination of such course, for the subsequent academic year, without being considered as a re-sit student. Such a student will be tagged with a grade RX in respect of that course and could face the final examination in the subsequent year.

1.4 Student Academic Counselling

Academic counselling aims to assist in the clarification of life/career goals of the student and in the development of educational plans for achieving these goals.

For this purpose, the faculty has a well organised procedure. The student can discuss issues, especially related to course selections, with any academic staff member of the Faculty. With regard to activities related to a particular course, the student may contact the relevant Course Coordinator.

In addition, the faculty has a "Student Forum", to discuss more general issues affecting a group of students or the entire student population of the faculty. The Faculty Student Forum consists of a representative from each Department (Student Counsellors) and two elected members from among the students. The students can forward their issues to the Student Forum through their representatives. The Student Counsellors attend to the issues and provide solutions at the departmental level. Unresolved issues are forwarded to the Faculty Board for discussion, where the two student representatives are also members.

1.5 Student Discipline

It is very important that a peaceful environment is ensured at all the times within the University premises so that everyone can attend to the studies without any disturbance. Therefore, everyone should behave without affecting the freedom of others. Although a majority of students behaves conforming to socially accepted norms, one cannot completely

eliminate indisciplined behaviour of a few. Therefore, the University has a set of regulations to deal with student indiscipline for the benefit of all students and staff.

1.6 Faculty Student Union

The Faculty Student Union is the legitimate body that communicates with the faculty about the issues faced by students. The Faculty Student Union is composed of 15 members elected by ballot from among all students of the faculty. In the same ballot, two members are also elected to serve as student representatives to the Faculty Board.

The students can forward their grievances through the student representatives to the Board of the Faculty of Engineering Technology.

Section 2: Study Programme Common Information

2.1 Structure of the Curricula

The curricula of all study programmes of the Faculty of Engineering Technology ensure that the student receives an academically as well as professionally recognised qualification in a particular field. However, it still allows the student to structure the subject combinations and total duration of study to suit individual needs. To gain a qualification a specific course combination stipulated for a particular specialisation needs to be fulfilled.

Courses

The fundamental entity in the dissemination process of knowledge is known as a **Course,** which in general sense is known as a **Subject**.

Course Categories

Each course is classified into one of the Course Categories denoted by specific letters as given below.

Engineering	X
Engineering projects	Y
Mathematics	Z
Industrial	I
General	J
Computer literacy	K
English	E
Management	M
Industrial Training	W

Course Levels

Each Course is also assigned a "SLQF Level", between one (1) and ten (10). The Level indicates the relative complexity of the course content. SLQF Levels 1 and 2 comprise the certificate programmes. SLQF Levels 3 to 7 are different stages in undergraduate study programmes leading to Higher Diploma and Honours Degree qualifications. Finally, the courses of postgraduate programmes are placed at Levels 7, 8, 9 and 10.

Credit Rating of a course

The Credit Rating assigned for a Course reflects the amount of time an average student is expected to devote for its study.

Total effective time expected to be spent by an average student for a course with a Credit Rating of one (1) is about 50 notional hours, but for Project and Training courses it is about 100 notional hours. The credit rating of a course is denoted by the fifth character in the Course Code.

Example: The course MHZ3551 has a Credit rating of 5, which requires about 250 notional hours of learning during the academic year.

Course Codes

Each course is assigned with a code consisting of seven letters and numbers. The Course Code comprises of sub codes to denote the Department that offer the course, Course Category, SLQF Level, Credit Rating and the serial number of the course assigned by the Department.

The codes allocated for the Departments of the Faculty are as follows:

Department/Faculty	Code
Agricultural and Plantation Engineering	AG
Civil Engineering	CV
Electrical and Computer Engineering	EE
Mathematics and Philosophy of Engineering	MH
Mechanical Engineering	DM
Textile and Apparel Technology	TA
Faculty of Engineering Technology	FD

Following are the codes for two Departments of the Faculty of Humanities and Social Sciences which offer certain courses for the study programmes of the Faculty of Engineering Technology.

Department	Code
English Language Teaching	LT
Legal Studies	LL

Example: Course Code CVX7640
  CV - Department of Civil Engineering
  X – Engineering Course Category
  7 – SLQF level
  6 – Credit Rating
  40 – Serial Number assigned by the Department for the course

The fifth character indicates the Credit Rating from 1 to 9. Credits values from 10 onwards are indicated by letters; A, B, C, ... Z.

2.2 Study Programmes
Study Programmes are made up of different course combinations. For the award of a qualification through a programme such as Advanced Certificate, Diploma, Higher Diploma, Degree or Honours Degree, three major considerations need to be fulfilled:

1. A total stipulated number of Course Credits required for an award should be acquired, while fulfilling the minimum requirements at different Levels.
2. Minimum stipulated number of Category Credits required for an award should be fulfilled by the student under each Course Category at identified Levels.
3. In order for the student to qualify in a Particular Field of Study, (e.g. Civil, Mechanical, Electrical, etc.), the list of Compulsory Courses required for an award in that field of study should also be satisfied.

The pathways to fulfil the Industrial Training requirements (W category courses) for the award is given in **Annex 1**.

2.3 Assessment
The Overall Assessment Mark (Z%) of a student in respect of any course is based on the Overall Continuous Assessment Mark (X%) and the mark obtained at the Final Examination (Y%), and is computed as follows. In order to sit for the Final Examination, X should be greater than or equal to 40%.

$$Z = 0.5*X + 0.5*Y, \text{ if } Y \geq 40$$
$$Z = Y, \text{ if } Y < 40$$

This criterion is not applicable for industrial training courses.

Each student who faces the Final Evaluation of a course will be awarded a grade and a corresponding Grade Point Value, as given in the following Table based on the Overall Assessment Mark (Z%).

Grade	Grade Point Value
A+	4.00
A	4.00
A-	3.70
B+	3.30
B	3.00
B-	2.70
C+	2.30
C	2.00
C-	1.70
D+	1.30
D	1.00
E	0.00

Performance Ranking
The performance of a student for degree study programmes are ranked based on Grade Point Average (GPA). The method of computing GPA is given under the description of each study programme in Section 3.

A student who achieves a Cumulative GPA above a certain value and satisfy other conditions as determined by the Faculty is included in the Dean's List for each academic year.

2.4 Special Awards
Students who have performed extremely well in Honours Degree programmes are rewarded with Gold Medals. The Gold Medals awarded by the Faculty are:

- Kulshreshtha Gold Medal for the best student in Bachelor of Science Honours in Engineering programme
- Thurairajah Gold Medal for the best final year project in Bachelor of Science Honours in Engineering programme
- ERU Gold Medal for the best research paper submitted for publication based on final year research project in Bachelor of Science Honours in Engineering programme
- Mrs. S.M. Abeygunesekera de Silva gold medal for the best Mechatronics student in Bachelor of Science Honours in Engineering programme
- Liyanaguruge Assie Annette de Silva gold medal for the best Agriculture student in Bachelor of Industrial Studies Honours programme
- Gold Medal for the best Civil Engineering Final Year Project in

Bachelor of Science Honours in Engineering programme
- Gold Medal for the best Civil Engineering student in Bachelor of Science Honours in Engineering programme

2.5 Exemptions

Students who have academic/professional qualifications other than entry requirements may be granted exemptions according to their qualifications. Such qualifications that the student could claim exemptions are listed under each study programme. However, notwithstanding the exemptions obtained, a student has to follow the relevant OUSL courses and obtain certain minimum number of credits to qualify for an award. Such minimum limits are given under the description of each study programme. If you possess any qualification other than those listed in this guidebook, you can seek exemptions by sending duly filled application form which is given in Annex 2, submitted on or before the specified date. The application form can also be downloaded from *https://ou.ac.lk/fengtec/*. Any exemptions granted will be informed at the time of registration.

2.6 StART@OUSL Programme

As the Open University conducts its study programmes using Open and Distance Learning pedagogy, it is very necessary that the students become familiar with self-learning. The student should also have a proficiency in English language, as all study programmes (except some Certificate/ Advanced Certificate Programmes) of the Faculty of Engineering Technology are conducted in English medium. To meet this requirement the University conducts a programme called Student Academic Readiness Training at OUSL (StART@OUSL) for all new students.

All students who wish to enrol in a programme of study leading to an Honours Degree at the OUSL should complete some courses offered under the StART@OUSL programme. You are strongly advised to follow this programme

as some of these courses will be prerequisites for the courses in the main degree programme as well as being a compulsory component for the awards.

Programme Content

Course Code	Course Title
Compulsory Courses	
LTE3401	English for General Academic Purposes [EGAP]
FDE3020	Empowering for Independent Learning [EfIL]
Optional Courses	
LTE3111	Second National Language (Sinhala)
LTE3112	Second National Language (Tamil)
FXE3114	Soft Skills for Personal Development
CSE3213	ICT Skills
DSE3215	Social Harmony

Fees for StART@OUSL
For LTE3401, the fee is Rs. 5500 and there is no fee for FDE3020. The students should pay the total course fee along with the 1st instalment.

Exemptions for EGAP
Students who have academic/professional qualifications may be granted exemptions according to their qualifications for the course, English for General Academic Purposes (EGAP). Such qualifications that the student could claim exemptions are listed under Annex 3.

2.7 Registering for Courses

Pre-requisites
In order to register for a course, a student has to have fulfilled certain pre-requisites. This could be one or several of the following: passing of related lower level Course/s, passing only the Continuous Assessments of certain lower level courses, concurrent registration for Course/s or acquisition of a certain number of credits at different levels and in course categories.

These conditions are abbreviated as given below.

P – Pass,

CA – Eligible in Continuous Assessment,

CR – Concurrent Registration

Level Pre-requisites

In addition to the pre-requisites specific to individual courses, Level pre-requisites related to EGAP and EfIL will apply for registering courses at different Levels as given below.

Level	Requirement
3	FDE3020 [CR], LTE3401 [CR] or VTL2001
4	FDE3020 [CA], LTE3401 [CA] or VTL2001
5, 6 and 7	FDE3020 [P], LTE3401 [P] or VTL2001

NOTE: Those who have obtained a pass for General English at the G.C.E. (A/L) examination will be granted VTL2001, however they will not be granted exemption for LTE3401. Therefore, it is compulsory that every undergraduate offers LTE3401. There are a few qualifications for which students can claim exemptions for LTE3401. The latest list will be available at the registration.

Minimum and Maximum Number of Credits

A student enrolling to a study programme has to register for a minimum of 8 Credits in Courses at the first registration. In subsequent years, this minimum limit does not apply, but the student has to obtain the studentship by paying relevant fees except course tuition fees.

Maximum number of Credits a student can register in an academic year is 38.

2.8 Fees for Study Programmes

Unlike the other national universities in Sri Lanka, the OUSL does charge fees from its students. This is related to the fact that prospective students could gain admission to study programmes after fulfilling the minimum entry requirements and the OUSL was set up primarily to cater to the needs of employed students.

However, the Government or the University has no intention of recovering the full cost of education from the students and major part of the cost of any study programme is borne by the State. As of today, the income from fees meets only a fraction of the total expenditure of the University. The Government, by grants disbursed through the University Grants Commission, meets the major component of the total expenditure. The fees payable by a student includes, registration fee, facilities fee, exemption fee (where applicable), library facility fee, tuition fee, etc.

The fees applicable for the academic year 2023/2024 are as follows:

Type of Fee	Certificate, Diploma and Degree Programmes (Rs.)	Postgraduate Programmes (Rs.)
Registration	500	1,500
Facilities	2,500	2,500
Library Facility	100	200
Instrument usage fee (one time only)	12500 (Except for Certificate Programme)	-
Exemption	300 per credit	
Tuition fee	Depends on the Course Level	

Tuition fee applicable for the academic year 2023/2024, on the Bachelor of Science Honours, and the Bachelor of Industrial Studies Honours programmes are given in the table below.

Course at SLQF Level	Tuition fee per Credit (Rs.)	Training courses (Rs.)
3 and 4	1980	3300
5, 6 and 7	3070	5500

Students registering for the courses TAI3270 Fashion Illustration I and TAI4373 Fashion Illustration II conducted by the

Department of Textile and Apparel Technology are required to pay an additional sum of Rs. 1,725 per Course.

The students registering for the course CVX5440 Surveying II conducted by the Department of Civil Engineering are required to pay an additional sum of Rs. 10,500 for participation at the residential survey camp.

These rates are liable to be revised.

All students who submit online applications will receive two vouchers; one for the main Faculty Programme (first instalment) and the other for the StART@OUSL programme. When you come for the registration you need to bring the university copies of two payment receipts for vouchers after both payments have been made. The course material for the first dispatch (first part of the course material) will be issued at the registration.

The second instalment voucher (amount of which will be based on course credits registered by the student) will be sent in due course. When you come to collect the course material for the second dispatch you have to produce the payment receipt for this second instalment voucher.

Scholarships
The University has a limited number of bursaries, including University Bursaries, Dean's list and Mahapola Scholarships to help students who are in need of financial support. For more details please see the Annex 4.

Section 3: Study Programme Details

This Section describes in detail the following Programmes of Study conducted by the Faculty of Engineering Technology.

Extract from the "SRI LANKA QUALIFICATION FRAMEWORK (SLQF)" published by the University Grants Commission, 2015

SLQF Level	Qualification Awarded
12	Doctor of Philosophy/Doctor of Letters/Doctor Science
11	Master of Philosophy
10	Master with course work and a research component
9	Masters by course work
8	Postgraduate Diploma
7	Postgraduate Certificate
6	Bachelors Honours
5	Bachelors
4	Higher Diploma
3	Diploma
2	Advanced Certificate (G.C.E. A/L or equivalent)
1	Certificate (G.C.E. O/L or equivalent)

Degree of Bachelor of Science Honours in Engineering - Study Programme

Aim of the Study Programme

The aim of the Study Programme is to provide an access, for the right candidates, to an educational system composed with outstanding and up-to-date academic content delivered within a well-planned curriculum framework and course syllabi with a provision for high flexibility in course selection, facilitating the focus on emerging subject areas in the industry, that will disseminate essential knowledge and skills in a wide range of engineering disciplines, and most suited for open distance learning pedagogy. The study Programme also gives due consideration to the social and environmental impacts and prepare the students to undertake postgraduate studies and research as career options.

Study Programme Educational Outcomes
To produce competent engineers;

- With up-to-date knowledge and expertise in their own specialty areas and acquired ingenuity to address engineering problems with holistic approach with due consideration to environment and society.

- With inspiration to be leaders in the advancement of their specialty areas of engineering by engaging in continuous professional development, research and scholarship

3.1 Degree of Bachelor of Science Honours in Engineering - Study Programme
The Bachelor of Science Honours in Engineering degree is designed carefully according to the requirements of the Sri Lanka Qualification Framework (SLQF), specifying minimum and maximum limits for each category of courses, to ensure that the programme is balanced, and it meets the academic requirements of professional

Engineering bodies, both in Sri Lanka (The Institution of Engineers, Sri Lanka - IESL) and overseas.

The Faculty expects a student who is awarded the Bachelor of Science Honours in Engineering degree to be able to:
- Develop creative and analytical ability and innovative thinking in engineering,
- Address social, environmental and economic issues related to engineering and
- Access and utilise engineering knowledge for the benefit of the society.

It is also possible for a student to obtain a Higher Diploma in an approved Technology discipline after successful completion of a required combination of courses and Credit requirements. The Higher Diploma is one of the main avenues to enter middle-level technical grades within the engineering disciplines.

The Faculty expects a student who has been awarded the Higher Diploma in Technology to be:
- Competent in the application of the well-known principles of engineering technology,
- Aware of social, environmental and economic issues related to technology and
- Self-motivated and capable of furthering career advancement

Special Note:
Students completing the compulsory Courses at the first two Levels (Levels 3 & 4) of the Bachelor of Science degree programme in the specialisation of <u>Civil Engineering</u> have the option of getting enrolment directly at the 3rd year of the Civil & Infrastructure degree programme conducted by the Royal Melbourne Institute of Technology (RMIT) of Australia.

Duration

The minimum duration of the Honours Degree programme, starting from level 3, is 5 academic years, and the maximum number of academic years a student can spend to complete the degree programme is three times the minimum and is fifteen (15) academic years.

Medium of instruction

The medium of instruction of the study programme is the language of English.

Areas of Specialisation

- Agricultural Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Electronic and Communication Engineering
- Mechanical Engineering
- Mechatronics Engineering
- Textile and Clothing Engineering

Eligibility for Admission

A person seeking admission to the programme leading to the award of the Degree of Bachelor of Science Honours in Engineering shall be required to have at least fulfilled one of the following:

- Obtained passes for all subjects of the Physical Science Stream, (Combined Mathematics, Physics and Chemistry) at the General Certificate of Education (Advanced Level) (GCE A/L) Examination, at one and the same sitting or
- Obtained the Advanced Certificate in Science with Courses in the disciplines of Mathematics, Physics and Chemistry, offered by The Open University of Sri Lanka or
- Obtained a minimum of three (3) credit (C) passes for Mathematics, Physics and Chemistry in Cambridge/Edexcel Advanced Level Examination within three years or
- Obtained an equivalent or higher qualification acceptable to the Senate of the University.

Recognition for the Associate Membership of the Institution of Engineers, Sri Lanka (IESL)

Faculty of Engineering Technology has been successful in the renewal of the professional recognition by the Institution of Engineers, Sri Lanka (IESL), for six specializations of the Degree of Bachelor of Science Honours in Engineering.

The recognition of the Degree by the IESL permits graduates to obtain the Associate Membership of the IESL, and later become Charted Engineers after fulfilling professional review requirements laid down by the IESL. Also, the IESL membership is required by an Engineer to secure appropriate level of registration at the Engineering Council of Sri Lanka (ECSL) to lawfully practice Engineering in this country.

However, the direct IESL recognition is only available for graduates who have surpassed the benchmark of being successful at the GCE (A/L) Examination with at least 2 Credit passes and 1 Simple pass in the Physical Science Stream (Combined Mathematics, Physics, and Chemistry), at one and the same sitting, if they have embarked in their undergraduate study on or after 2018 May.

Requirements for the award of the Degree

In order for a student to qualify for the award of the Degree of Bachelor of Science Honours in Engineering, such student has to fulfil the following requirements, within a maximum period of 12 academic years (on the rule that stipulates maximum period allowed is three times the minimum period of 4 years).

(1) Successful completion of all compulsory courses for the selected engineering specialisation,
and
(2) Fulfil the level-wise and category-wise course credits as given in the Table 1.

Table 1 - Course credits requirements for the Award of Bachelor of Science Honours in Engineering Degree

Category	Minimum credits	Maximum credits
Engineering (X)	90 Subject to a minimum of 40 at Level 5 or above, of which at least 5 at Level 6 or above	95 Subject to a minimum of 40 at Level 5 or above, of which at least 5 at Level 6 or above
Engineering projects (Y)	9 of which at least 8 at Level 6 or above	14 of which at least 8 at Level 6 or above
Mathematics (Z)	20 subject to a minimum of 5 at Level 5 or above	25 subject to a minimum of 5 at Level 5 or above
General (J)	5	10
Management (M)	15 Subject to a minimum 10 at Level 5 or above	20 Subject to a minimum 10 at Level 5 or above
Industrial Training (W)	8	8
Total	152 Subject to a minimum of 75 at Level 5 or above, of which at least 20 at Level 6 or above	

Requirements for the award of the Higher Diploma

A student could obtain Higher Diploma in an approved technology discipline as an intermediate award. In order to qualify for the award of Higher Diploma, a student has to meet the following requirements.

(1) Successful completion of all compulsory courses at levels 3 and 4 for the selected engineering specialisation, and
(2) Fulfil the level-wise and category-wise minimum course credits as given in Table 2.
(3) Pass all Level 3 and 4 Compulsory courses, excluding Engineering Mathematics III (MHZ4553).

Table 2- Course credits requirements for the Award of the Higher Diploma in an approved discipline

Category	Minimum credits	Maximum credits
Engineering (X)	45 Subject to a minimum of 20 at Level 4 or above	50 Subject to a minimum of 20 at Level 4 or above
Engineering projects (Y)	1 at Level 4	4 at Level 4
Mathematics (Z)	10	15
General (J)	0	5
Management (M)	5 at Level 3 or 4	7 at Level 3 or 4
Industrial Training (W)	8	8
Total	74 Subject to a minimum of 30 at Level 4	

Grade Point Average (GPA)

The GPA is computed by considering the courses at levels 4, 5, 6 and 7 totalling to 90 credits. In selecting the courses for 90 credits the following sequence will be followed.

(1) Compulsory Courses at Levels 5, 6 and 7
(2) Non-compulsory Courses at Levels 5, 6 and 7 with the higher GPVs.
(3) Compulsory courses at level 4 with the higher GPVs.

In a situation, where exactly ninety (90) credits cannot be obtained, the courses are selected to the nearest value below ninety (90), and the remainder credit is taken as a Part Credit of the next course. However the Industrial Training courses are not considered when calculating the GPA.

The Grade Point Average (GPA) is computed as follows:

$$GPA = \frac{\left\{\sum (Credit Rating of the Course) * (GPV)\right\} + (Part Credit of the Course) * (GPV)}{90}$$

Limits for Exemptions

Notwithstanding any exemptions granted for prior qualifications, a student shall acquire, by successful completion in accordance with the Scheme of Assessment, a minimum number of Credits as shown below for the awards.

For the Degree:

Minimum Credit requirements a student shall acquire by <u>successful completion</u> in accordance with the Scheme of Assessment for the award of the Honours Degree are as given below.

- Level 7 (considering all Categories): 10
- Level 7 (considering X and Y categories): 7
- Levels 5, 6 and 7 (considering all Categories): 38
- Levels 5, 6 and 7 (considering X, Y and Z Categories): 27
- Total (considering all Categories and all levels from 3 to 7): 76

For the Higher Diploma:

Minimum Credit requirements a student shall acquire by <u>successful completion</u> in accordance with the Scheme of Assessment for the award of the Higher Diploma are as given below.

- Level 4 (considering all Categories): 15
- Level 4 and above (considering X and Y Categories): 11
- Total (considering all Categories and all levels from 3 to 7): 37

A list of qualifications for which exemptions could be claimed is given later in this document.

> ***Students are required to apply in a prescribed form after completing the award requirements to receive the Higher Diploma or the Degree***

Curricula for different specialisations

The curriculum of the Programme of Study leading to the awards of Bachelor of Science Honours in Engineering degree and the Higher Diploma has been revised to comply with the Sri Lanka Qualification Framework and to meet the professional accreditation requirements.

This Section gives the combination of courses for the specialisations of the

Bachelor of Science Honours in Engineering Degree.

Special notes applicable for all specialisations

Engineering Mathematics (Z) and General (J) Category courses have to be selected from the following list if not included in the compulsory lists for specialisations, in order to meet Z and J Category Course Credit requirements.

Courses (Revised Curriculum)		Pre-requisites
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
LLJ3245	Introduction to Laws of Sri Lanka	None
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
MHJ4241	History of Technology	Pass in 20 credits
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
MHZ5355	Discrete Mathematics	MHZ3551(P)
MHJ5342	Technology, Society and Environment	Pass in 45 credits
MHJ5343	Nature of Science	Pass in 45 credits

Curriculum for Agricultural Engineering Specialisation

Compulsory courses

Course		Pre-requisites
Level 3		
AGX3201	Basic Biology	None
CVX3340	Introduction to Hydraulics & Hydrology	DMX3401 (CR), MHZ3551 (CR)
EEX3410	Introduction to Electrical Engineering	MHZ3552 (CR)
EEX3417	Software Development for Engineers	AGM3203 (CR)
EEX3351	Electronics I	EEX3410 (CR)
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3302	Engineering Mechanics	MHZ3551(CR), MHZ3552(CR)
DMX3305	Introduction to Engineering Design Graphics	None
DMX3107	Workshop Practice	None
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
AGX4404	Crop Technology	None
AGX4405	Postharvest Engineering and Technology I	None
AGX4356	Soil Science	None
CVX4342	Surveying I	DMX3305(P), MHZ3551(P), MHZ3552(P)
DMX4205	Strength of Materials I	DMX3302(CA), MHZ3551(CA), MHZ3552(CA)
AGX4302	Design of Agricultural Machine Elements	DMX3302(CA), DMX3305 (CA), DMX4205(CR)
AGX4376	Crop Processing Technology	AGX4404(CR) or AGX4405(CR)
AGY4180	Group Project (Agricultural Engineering)	Pass in 15 credits
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	Pass in 18 credits in Level 3
Level 5		
AGX5206	Food Science	None
AGX5308	Soil Management Tillage and Traction	AGX4356 (CA)
AGX5314	Engineering Design (Agricultural Engineering)	DMX4205(CA), DMX4307(CA), AGX4302(CA), AGX5511(CR)
AGX5510	Design and Management of Irrigation and Drainage	AGX4356(CA)
AGX5511	Farm Power and Mechanization	DMX4205(CA)
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307 (P)
Level 6		
AGX6180	Research Methodology and Project Identification (Agricultural Engineering)	30 credits at Level 4 or above (P)
DMM6601	Management for Engineers	CVM5401 (CA), 60 credits (P)
AGX6387	Plantation Crop Technology	AGX4404 (P)
Level 7		
AGX7216	Structural Designs for Commercial Farming	DMX3305(P), MHZ5554(CA)
AGX7417	Agricultural Hydrology	CVX3340(P), AGX4356(P),

AGX7418	Food Engineering	AGX4405 (P)
AGX7283	Groundwater Resources Management	AGX4356(P)
AGY7880	Engineering Research Project (Agricultural Engineering)	Pass in 80 credits including 50 credits Pass in X category courses
Industrial Training		
AGW4402	Industrial Training I (Agricultural Engineering)	Pass in 36 credits at level 3
AGW5402	Industrial Training II(Agricultural Engineering)	AGW4401 (CR), pass in 15 credits at level 4 or above

Elective courses

AGX5212	Postharvest Engineering and Technology II	AGX4405(CA), AGX5206(CR)
AGX5277	Food Safety and Quality Management Systems	AGX5206(CR), AGX4405(CA)
AGX5415	Horticultural Landscaping Technology	AGX4404 (CA)
AGX5565	Soil Plant Water Relationship	AGX4356(CA)
AGX5309	Sustainable Agricultural Technology	AGX3201(P), AGX4356(CR)
AGX6377*	Precision Agriculture	68 Credits (P)
AGX6284	Impact of Climate Change on Water Resources	AGX5565(CR) and AGX6283 (CR)
AGX6490	Soil and Water Conservation	AGX4356(P)
DMX6302	Energy, Environment and Sustainability	75 Credits (P)
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
CVX7350*	Remote Sensing and GIS	none

*Not offered in 2023/2024

Special Note:
Bachelor of Science Honours in Engineering (Agricultural Engineering) will be offered only if adequate number of students (as decided by the Department) are registered for the programme. In the event BScHons (Eng) in Agricultural Engineering is not offered, those students who have applied will be allowed to register for any other specialisation of study programme provided they possess the required entry qualifications.

Curriculum for Civil Engineering Specialisation

Compulsory Courses

Courses		Prerequisites
Level 3		
CVX3340	Introduction to Hydraulics & Hydrology	DMX3401 (CR), MHZ3551 (CR)
CVX3441	Structural Analysis and Design I	DMX3305 (CR), CVX3442 (CR)
CVX3442	Strength of Materials	MHZ3551(CR), MHZ3552(CR)
EEX3410	Introduction to Electrical Engineering	MHZ3552 (CR)
EEX3417	Software Development for Engineering	AGM3203 (CR)
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3305	Introduction to Engineering Design Graphics	None
DMX3107	Workshop Practice	None
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
CVX4240	Hydraulic Engineering I	CVX3340 (P), DMX3401 (P), MHZ3551 (P)
CVX4241	Engineering Hydrology	CVX3340 (P), MHZ3551 (P), MHZ3552 (P)
CVX4342	Surveying I	DMX3305(P), MHZ3551(P), MHZ3552(P)
CVX4343	Soil Mechanics	CVX3340 (P), CVX3442 (P)
CVX4344	Engineering Geology	CVX4343 (CR), CVX4241 (CR)
CVX4545	Structural Analysis and Design II	CVX3441 (P), CVX3442 (P)
CVX4446	Construction Engineering & Materials	CVX3442 (P), MHZ3552 (P), AGM3203 (P), DMX3107 (CR)
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	Pass in 18 credits in Level 3
Level 5		
CVX5440	Surveying II	CVX4342 (P), CVX4241 (P), CVX4344 (P). MHZ4553 (P) & Pass in additional 30 credits in X Category, subjected to a minimum of 16 at Level 4 or above.
CVX5241	Hydraulic Engineering II	CVX4240 (P), CVX4241 (P)
CVX5242	Mechanics of Fluids	CVX4240 (P), CVX4241 (P)
CVX5443	Structural Analysis	CVX4545 (P), MHZ4553 (P)
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307 (P)
Level 6		
CVX6444	Geotechnics	CVX4343 (P)
CVX6345	Environmental Engineering	CVX3340 (P), CVX4240 (P), CVX4241 (P)
CVX6546	Construction Engineering and Management	CVX4446 (P) and CVX4545 (P)
CVX6180	Research Methodology and Project Identification (Civil Engineering)	None
DMM6601	Management for Engineers	CVM5401 (CA), 60 credits (P)
CVW6803	Industrial Training (Civil -Undergraduate)	MHZ5554 (P), CVX5440 (P), CVX5241 (P), CVX5242 (P), CVX5443 (P), Eligibility in 21 credits at level 5 or above

Level 7		
CVX7640	Structural Design	CVX5443 (P), CVX4545 (P)
CVX7241	Geotechnical Design	CVX6444 (P)
CVX7242	Environmental Engineering Design	CVX6345(CR)
CVY7880	Engineering Research Project (Civil)	Pass in 100 credits including: 70 credits Pass in X category courses, CVX6180(P)
CVY7385	Comprehensive Design Project (Civil)	Pass in 100 credits including: 70 credits Pass in X category courses, CVX7640(CR), CVX7241(CR), CVX7242(CR)

Elective Courses

Courses		Prerequisites
*CVX4347	Irrigation Engineering	CVX3340 (P)
CVX4348	Water and Wastewater Engineering	CVX3340 (P)
CVX4349	Building Engineering	DMX3305(P), EEX3410 (P), CVX4446 (CR)
CVX4350	Quantity Surveying	CVX4342(CR), CVX4446(CR)
**CVY4185	Group Project	MHZ3551(P), MHZ3552 (P), DMX3305 (P), CVX3340 (P), CVX3441 (P), CVX3442 (P), CVX4343 (CR), CVX4545 (CR), CVX4446 (CR)
CVW4802	Industrial Training	MHZ3551(P), MHZ3552(P), EEX3417(P), DMX3401(P), EEX3410(P), DMX3305(P), CVX3340(P), CVX3441(P), CVX3442(P), AGM3203(P), Eligibility in 20 credits at level 4 or above
CVX7343	Bridge Engineering	CVX7640 (CR)
CVX7344*	Computational Mechanics using Finite Element Methods	CVX7640 (CR)
CVX7345	Highway Engineering and Design	CVX4343 (P), CVX4446 (P), CVX5440 (P)
CVX7346	Ground Improvement Techniques	CVX4343(P), CVX6444 (P)
CVX7347*	Applied Engineering Geology and Rock Mechanics	CVX4344 (P), CVX6444 (P)
CVX7348*	Coastal Engineering and Coastal Zone Management	CVX5242 (P), MHZ5554 (P), CVX6345 (CR)
CVX7349	Environmental Modelling and Management	CVX5242 (CA) CVX6345 (CA), CVX7242 (CR)
CVX7350*	Remote Sensing and GIS	None

*Not offered in 2023/2024 **Compulsory for Higher Diploma

Curriculum for Computer Engineering Specialisation

Compulsory Courses

Course		Prerequisites
Level 3		
EEX3331	Electrical Measurements and Instrumentation	EEX3410(CR)
EEX3336	Communications and Computer Technology	AGM3203(CR), EEX3351(CR), EEX3417(CR)
EEX3351	Electronics I	EEX3410(CR)
EEX3410	Introduction to Electrical Engineering	MHZ3552(CR)
EEX3417	Software Development for Engineers	AGM3203(CR)
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3305	Introduction to Engineering Design Graphics	None
DMX3107	Workshop Practice	None
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
EEX4331	Circuit Theory and Design	EEX3410(CA), MHZ3551(CA), MHZ3552(CA)
EEX4332	Electrical Power	EEX3410(CA), MHZ3551(CA)
EEX4435	Data Structures and Algorithms	EEX3417(CA), MHZ3551(CA), AGM3203(CA), pass in 15 credits at level 3
EEX4347	Software Engineering Concepts	EEX3417(CA), EEX3336(CA), AGM3203(CA) , pass in 15 credits at level 3
EEX4436	Microprocessors and Interfacing	{[EEX4351(CR),EEX3336(P), EEX3351(P)] or DMX3304(P)}, EEX3417(P), MHZ3551(P), AGM3203(P)
EEX4351	Electronics II	EEX3410(P), EEX3351(CA), MHZ3551(P), MHZ3552(CA), AGM3203(P)
EEY4181	Group Project (Computer Engineering)	Pass in 30 credits
EEW4301	Industrial Training (Electronics)	Pass in 36 credits at level 3, EEX4351(CR)
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	Pass in 18 credits at Level 3
Level 5		
EEX5434	Data Communications & Networking	EEX3410(P), EEX3336(P), MHZ3551(P), MHZ3552(P), AGM3203(P)
EEX5335	Operating Systems	EEX4435(CA), EEX4436(CA), EEX5536(CR), MHZ5355(CR), 36 credits pass from level 3
EEX5536	Computer Architecture	[EEX3417(P), EEX3336(P), EEX3351(P), MHZ4553 (P), EEX4436(CA), 30 credits pass
EEX5346	Embedded Systems	[EEX3417(P), EEX3336(P), EEX3351(P), EEX4436(CA), EEX4351(CA), [EEX5335(CR) or EEX5564(CR)], MHJ5342(CR)
EEX5351	Digital Electronic Systems	EEX3336(P), EEX3410(P), EEX3417(P), MHZ3551(P), AGM3203(P), EEX4351(P), EEX4436(CA)
EEX5360	Signals and Systems	EEX3336(P), MHZ4553(CR), MHZ3551(P), MHZ3552(P)
EEX5270	Information Security	MHZ3551(P), EEX3417(P), EEX4435(P), 30 credits pass at level 3

MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
MHZ5355	Discrete Mathematics	MHZ3551(P)
MHJ5342	Technology, Society and Environment	45 credits pass
CVM5401	Accounting for Engineers	AGM4307(P)
EEW5501	Industrial Training (Computer)	65 credits pass, EEX4347(P), EEW4301(CR)
Level 6		
EEX6335	Compiler Design	AGM3203(P), EEX4435(P), EEX5536(CA), MHZ3551(P), MHZ5355(P)
EEX6236	Advanced Computer Architecture	MHZ4553 (P), EEX4436(P), EEX5335(CA) EEX5536(CA) and 60 credits pass
EEX6181	Research Methodology and Project Identification (Computer Engineering)	Pass in 60 credits, EEX5335(CA), EEX5536(CA), EEX4435(P)
DMM6601	Management for Engineers	CVM5401(CA), 60 credits(P)
EEM6201	Professional Practice	Pass in 36 credits at level 3, Pass in 24 credits at level 4 or above
Level 7		
EEX7436	Processor Design	EEX5351(CA), EEX5536(CA), EEX3417(P), AGM3203(P), MHZ3551(P), EEX3336(P), EEX4436(P)
EEX7337	System Design in Groups	EEX4435(P), EEX4347(P), EEX4436(P), EEX5536(P), EEX5351(P), EEX5346(P), EEX5270(CA), MHZ5554(P), Pass in 80 credits including 50 credits Pass in X category
EEY7881	Engineering Research Project (Computer Engineering)	Pass in 80 credits including 50 credits Pass in X category, EEX6181(P), EEX7436(CR), EEX6236(CR)

Elective Courses

Course		Prerequisites
EEX3266	Information Systems and Data Management	None
EEX3269	Mobile Application Development for Android	None
EEX3262	Introduction to Object Oriented Programming	EEX3417(CR)
EEX3372	Programming in Python	EEX3417(CR)
*EEX4146	Digital System Simulation	EEX3336(P), {EEX3351(P) or DMX3304(P)}, EEX3417(P), MHZ3551(P), AGM3203(P), EEX4351(CR)
EEX4362	Object Oriented Design and Programming	EEX3262(CA), EEX3417(P), MHZ3551(CA)
EEX4366	Data Modelling and Database Systems	EEX3266(CA)
EEX5280	Creative Design	45 credits pass
EEX5466	Advanced Database Systems	EEX3266(P), EEX4366(CA)
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
EEX5467	Software Testing and Quality Assurance	EEX4347(P), 20 credits pass at level 3
EEX7241	Neural Network & Fuzzy Logic Applications	65 credits pass, EEX3417(P)
EEX7244	Data Mining	EEX4435(P), MHZ4553(P), 60 credits pass
EEX7340	AI Techniques & Agent Technology	EEX4435(P), EEX4347(P), MHZ5355(P)
EEX7171	Emerging Technologies	60 credits pass

*Not offered in 2023/2024

Curriculum for Electrical Engineering Specialisation

Compulsory Courses

Course		Prerequisites
Level 3		
EEX3331	Electrical Measurements and Instrumentation	EEX3410(CR)
EEX3336	Communications and Computer Technology	AGM3203(CR), EEX3351(CR), EEX3417(CR)
EEX3351	Electronics I	EEX3410(CR)
EEX3410	Introduction to Electrical Engineering	MHZ3552(CR)
EEX3417	Software Development for Engineers	AGM3203(CR)
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3305	Introduction to Engineering Design Graphics	None
DMX3107	Workshop Practice	None
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
EEX4331	Circuit Theory and Design	EEX3410(CA), MHZ3551(CA), MHZ3552(CA)
EEX4542	Power Systems I	EEX3410(P), MHZ3551(P), MHZ3552(CA), EEX4331(CR), EEX4448(CR), DMX3305(P)
EEX4434	Electrical Installations	EEX3410(P), DMX3305(P), [EEX4542(CR) or EEX4332(CR)]
EEX4448	Electrical Machines	EEX3410(P), MHZ3551(P), MHZ3552(CA), EEX4542(CR)
EEX4436	Microprocessors and Interfacing	{[EEX4351(CR),EEX3336(P), EEX3351(P)] or DMX3304(P)}, EEX3417(P), MHZ3551(P), AGM3203(P)
EEX4351	Electronics II	EEX3410(P), EEX3351(CA), MHZ3551(P), MHZ3552(CA), AGM3203(P)
EEY4182	Group Project (Electrical engineering)	Pass in 30 credits
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	Pass in 18 credits in Level 3
Level 5		
EEX5352	Power Systems II	EEX4448(CA), EEX4542(CA), MHZ4553(CA), Pass in 36 credits at level 3
EEX5338	High Voltage Engineering	EEX4448(CA), EEX4542(CA), Pass in 36 credits at level 3
EEX5348	Electrical Machines and Drives	EEX4448(CA), EEX5453(CR), Pass in 36 credits at level 3
EEX5351	Digital Electronic Systems	EEX3336(P), EEX3410(P), EEX3417(P), MHZ3551(P), AGM3203(P), EEX4351(P), EEX4436(CA)
EEX5453	Power Electronics	EEX4351(CA), EEX4331(CA), [EEX4542(CA) or EEX4332(P)], Pass in 36 credits at level 3
DMX5403	Control Systems Engineering	MHZ5554(CR), 30 credits in X category
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307(P)
Level 6		
EEX6354	Comprehensive Electrical Engineering Design	EEX4542(P), EEX4448(P), EEX5453 (CA), EEX5352(CA), MHZ3551 (P), MHZ3552 (P), AGM3203 (P), DMX3401 (P)
EEX6182	Research Methodology and Project Identification (Electrical engineering)	Pass in 60 credits

EEX6441	Electromagnetism and Wave Propagation	MHZ4553(P), MHZ5554(CR), Pass in 50 credits at levels 3 and 4
DMM6601	Management for Engineers	CVM5401(CA), 60 credits(P)
Level 7		
EEX7231	Advanced Circuit Design and Analysis	EEX4331(P), MHZ4553(CA), Pass in 60 credits at level 3 and 4
EEX7432	Power Systems Planning, Operations and Control	DMX5403(CA), EEX5352(CA), EEX4542(P), Pass in 60 credits at level 3 and 4
EEY7882	Engineering Research Project [Electrical]	Pass in 105 credits including 70 credits Pass in X category, EEX5352(P), EEX6182(P), EEX7432(CR), EEW6502(CR) or EEW4502(CR)
Industrial Training		
EEW4301	Industrial Training I (Electronics)	Pass in 36 credits at level 3, EEX4351(CR)
And **one** of		
EEW4502	Industrial Training II (Electrical power)	Pass in 45 credits, EEX4542(CA), EEX4448(CA)], EEW4301(CR)
EEW6502	Industrial Training II (Electrical Power - undergraduate)	EEX4542(CA), EEX4448(CA), EEW4301(CR), EEX5352(CA), Pass in 60 credits

Elective Courses

Course		Prerequisites
EEX3262	Introduction to Object Oriented Programming	EEX3417(CR)
EEX3266	Information Systems and Data Management	None
EEX3269	Mobile Application Development for Android	None
EEX5434	Data Communications and Networking	EEX3410(P), EEX3336(P), MHZ3551(P), MHZ3552(P), AGM3203(P)
EEX5346	Embedded Systems	[EEX3417(P), EEX3336(P), EEX3351(P), EEX4436(CA), EEX4351(CA), [EEX5335(CR) or EEX5564(CR)], MHJ5342(CR)
EEX5360	Signals and Systems	EEX3336(P), MHZ4553(CR), MHZ3551(P), MHZ3552(P)
EEX5280	Creative Design	Pass in 45 credits
EEX5564	Computer Architecture and Operating Systems	EEX3336(P), EEX4436(CA), 36 credits pass at level 3
EEX6450	Analog Electronic Systems and Instrumentation	EEX4331(P), DMX5403(CA), EEX4351(P), Pass in 50 credits at levels 3 and 4
EEX6253	Physical and Optoelectronics	MHZ4553(P), EEX4351(P), Pass in 50 credits at levels 3 and 4
TAX6556	Ergonomics	Pass in 45 credits at level 4 or above
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
EEX7241	Neural Network & Fuzzy Logic Applications	65 credits pass, EEX3417(P)
*EEX7342	Advanced Control Engineering	DMX5403(P), MHZ5554(P), Pass in 80 credits
*EEX7353	Power Electronic Applications and Drives	EEX5453(CA), EEX6354(P), EEX5352(CA), MHZ4553(P), Pass in 60 credits at levels 3 and 4
EEX7171	Emerging Technologies	Pass in 60 credits
DMX7305	Renewable Sources of Energy	MHZ4553(P), {[DMX3401(P) and EEX4542(P)] or [DMX4202(P) and DMX4203(P)]}
DMX7301	Thermal Power Generation	[DMX4202(P) and DMX5205(CA)] or [DMX3401(P) and EEX5348(CA)]

* Not offered in 2023/2024

Curriculum for Electronic & Communication Engineering Specialisation

Compulsory Courses

Course		Prerequisites
Level 3		
EEX3331	Electrical measurements and instrumentation	EEX3410(CR)
EEX3336	Communications and Computer Technology	AGM3203(CR), EEX3351(CR), EEX3417(CR)
EEX3351	Electronics I	EEX3410(CR)
EEX3410	Introduction to Electrical Engineering	MHZ3552(CR)
EEX3417	Software Development for Engineers	AGM3203(CR)
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3305	Introduction to Engineering Design Graphics	None
DMX3107	Workshop Practice	None
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
EEX3262	Introduction to Object Oriented Programming	EEX3417(CR)
Level 4		
EEX4331	Circuit Theory and Design	EEX3410(CA), MHZ3551(CA), MHZ3552(CA)
EEX4332	Electrical power	EEX3410(CA), MHZ3551(CA)
EEX4330	Communications	EEX3410(P), EEX3336(CA), MHZ3551(P), MHZ3552(P)
EEX4436	Microprocessors and Interfacing	{[EEX4351(CR), EEX3336(P), EEX3351(P)] or DMX3304(P)}, EEX3417(P), MHZ3551(P), AGM3203(P)
EEX4351	Electronics II	EEX3410(P), EEX3351(CA), MHZ3551(P), MHZ3552(CA), AGM3203(P)
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	Pass in 18 credits at Level 3
EEY4183	Group Project (Electronics and Communication)	Pass in 30 credits
EEW4403	Industrial Training I [Electronic and Communication]	Pass in 36 credits at level 3, DMX3107(P), EEX4351(CR), EEX4330(CR)
Level 5		
EEX5150	Electronic Circuit Design	EEX4331[P], 35 credits pass in level 3
EEX5360	Signals and Systems	EEX3336(P), MHZ4553(CR), MHZ3551(P), MHZ3552(P)
EEX5434	Data Communications & Networking	EEX3410(P), EEX3336 (P), MHZ3551(P), MHZ3552(P), AGM3203(P)
EEX5333	Communication Theory and Systems	EEX3336(P), EEX4330(P), MHZ4553(P), 36 credits pass at level 3
EEX5351	Digital Electronic Systems	EEX3336(P), EEX3410(P), EEX3417(P), MHZ3551(P), AGM3203(P), EEX4351(P), EEX4436(CA)
DMX5403	Control Systems Engineering	MHZ5554 (CR), 30 credits pass in X category
EEX5564	Computer Architecture and Operating Systems	EEX3336(P), EEX4436(CA), 36 credits pass at level 3
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307(P)

EEW5403	Industrial Training II [Electronic and Communication]	Pass in 45 credits, EEX4351(P), EEX4330(P), EEW4403(CR),
Level 6		
EEX6339	Wireless Communications	EEX5333(CA), MHZ4553(P), Pass in 50 credits at levels 3 and 4
EEX6253	Physical and Optoelectronics	MHZ4553(P), EEX4351(P), Pass in 50 credits at levels 3 and 4
EEX6450	Analog Electronic Systems and Instrumentation	EEX4331(P), DMX5403(CA), EEX4351(P), Pass in 50 credits at levels 3 and 4
EEX6441	Electromagnetism and Wave Propagation	MHZ4553(P), MHZ5554(CR), Pass in 50 credits at levels 3 and 4
DMM6601	Management for Engineers	CVM5401(CA), 60 credits(P)
EEX6183	Research methodology and project identification (Electronics and Communication)	Pass in 60 credits
Level 7		
EEX7355	Comprehensive Electronics Design	EEX4351(P), EEX5333(CR), EEX5150(CA), EEX5351(CR), EEX6450(CR), MHZ3551(P), MHZ3552(P), AGM3203(P)
EEX7333	Microwave Devices and Antennas	EEX6441(P), MHZ4553(P), Pass in 80 credits
EEY7883	Engineering Research Project (Electronics and Communication)	Pass in 90 credits including 60 credits Pass in X category, EEX5333(P), EEX5351(P), EEX5150(P), EEX6183(CA)

Elective Courses

Course		Prerequisites
EEX3266	Information Systems and Data Management	None
EEX3269	Mobile Application Development for Android	None
EEX4434	Electrical Installations	EEX3410(P), DMX3305(P), EEX4542(CR) or EEX4332(CR)
EEX5280	Creative Design	45 credits pass
EEX5346	Embedded Systems	EEX3417(P), EEX3336(P), EEX3351(P), EEX4436(CA), EEX4351(CA), [EEX5335(CR) or EEX5564(CR)], MHJ5342(CR)
EEX5453	Power Electronics	EEX4351(CA), EEX4331(CA), [EEX4542(CA) or EEX4332(P)], Pass in 36 credits at level 3
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
EEX7434	Digital Signal Processing	EEX5360(P), Pass in 45 credits
EEX7436	Processor Design	EEX5351 (CA), [EEX5536(CA), EEX3417(P), AGM3203(P), MHZ3551(P), EEX3336(P), EEX4436(P)
*EEX7339	Information Theory and Coding	MHZ4553(P), EEX5333(P), Pass in 80 credits
*EEX7343	Optical Communications	EEX6253(CA), EEX5333(P), Pass in 80 credits
*EEX7342	Advanced Control Engineering	DMX5403(P), MHZ5554(P), Pass in 80 credits
*EEX7353	Power Electronic Applications and Drives	Pass in 60 credits at level 3 and 4, MHZ4553(P), EEX5453(CA), EEX6354(P), EEX5352(CA),
DMX7304	Factory Automation	DMX4409(P) OR EEX4436(P) OR DMX5403(P)
EEX7171	Emerging Technologies	Pass in 60 credits

* Not offered in 2023/2024

Curriculum for Mechanical Engineering Specialisation

Compulsory Courses

Course		Prerequisites
Level 3		
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3302	Engineering Mechanics	MHZ3551(CR), MHZ3552(CR)
DMX3203	Introduction to Engineering Materials	None
DMX3304	Applied Electronics	EEX3410(CR)
DMX3305	Introduction to Engineering Design Graphics	None
DMX3206	Introduction to Manufacturing Processes	DMX3107(CR)
DMX3107	Workshop Practice	None
EEX3410	Introduction to Electrical Engineering	MHZ3552(CR)
EEX3417	Software Development for Engineers	AGM3203(CR)
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
DMX4201	Advanced Engineering Design Graphics	DMX3305(P)
DMX4202	Applied Thermodynamics I	DMX3401(CA)
DMX4203	Applied Fluid Dynamics I	DMX3401(CA)
DMX4204	Machine Dynamics	DMX3302(CA), MHZ3551(CA), MHZ3552(CA)
DMX4205	Strength of Materials I	DMX3302(CA), MHZ3551(CA), MHZ3552(CA)
DMX4306	Design of Machine Elements	DMX3302(CA), DMX3203(CA), DMX3305 (CA)
DMX4307	Electrical Machines and Drives	EEX3410 (CA), DMX3304 (CA), MHZ3551(CA), MHZ3552(CA)
DMX4208	Automobile Technology	DMX3401(CA)
DMX4212	Manufacturing Engineering	DMX3206(CA), MHZ3551(CA), MHZ3552(CA)
EEX4436	Microprocessors and Interfacing	{[EEX4351(CR),EEX3336(P), EEX3351(P)] or DMX3304(P)}, EEX3417(P), MHZ3551(P), AGM3203(P)
DMY4101	Group project (Mechanical Engineering)	AGM3203(CA), DMX3305(CA)
AGM4307	Economics and Marketing for Engineers	18 credits (P)
DMW4801	Industrial Training (Mechanical - Diploma)	38 credits at Level 3 (P), 20 credits in X category courses at Level 4 (CA)
Level 5		
DMX5201	Advanced Engineering Mechanics	DMX3302(P), DMX4205(CA), DMX4204(CA), MHZ3551(P), MHZ3552(P)
DMX5302	Strength of Materials II	DMX3302(P), DMX4205(CA), MHZ3551(P), MHZ3552(P)
DMX5403	Control Systems Engineering	MHZ5554 (CR), 30 credits in X category courses (P)
DMX5204	Materials Engineering	DMX3203 (P)
DMX5205	Applied Thermodynamics II	DMX4202(CA), MHZ4553(CA)

DMX5206	Applied Fluid dynamics II	DMX4203(CA), MHZ4553(CA)
DMX5307	Mechanical Engineering Design Project	DMX4306(CA), DMX4204(CA), DMX4205(CA), DMX5403(CR)
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307(P)
Level 6		
DMX6180	Research Methodology and Project Identification (Mechanical/Mechatronics Engineering)	30 credits at Level 4 or above (P)
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
DMX6302	Energy, Environment and Sustainability	75 Credits (P)
DMM6601	Management for Engineers *	CVM5401 (CA), 60 credits (P)
DMW6801	Industrial Training (Mechanical - Undergraduate)	DMX5201(P), DMX5302(P), DMX5403(P), DMX5204(P), DMX5205(P), DMX5206(P), DMX5307(CA)
Level 7		
DMX7301	Thermal Power Generation	[DMX4202(P) and DMX5205(CA)] or [DMX3401(P) and EEX5348(CA)]
DMX7402	Analysis of Manufacturing Systems & Processes	DMX3206 (P), MHZ5554(CA), 60 credits (P)
DMY7880	Engineering Research Project (Mechanical Engineering)	DMX6180(CA), 50 credits in X category courses (P)

Elective Courses

Courses		**Prerequisites**
DMX5208	Automobile Engineering	DMX4208(P)
DMX5209	Automotive Electronics	DMX3304 (P), DMX4307(CA), DMX4208(CA), EEX4436(CA)
DMX5210	Vehicle Dynamics and Design of Automotive Components	DMX4208(P)
DMX5211	Plant Maintenance	DMX3206 (P), MHZ5554 (CR)
DMX5212	Computer Aided Design and Manufacturing	DMX4201(CA), DMX4212(CA)
DMX6303	Nano Technology	DMX3203(P), DMX3206(P), 60 Credits (P)
DMX6304	Computational Fluid Dynamics	MHZ4553(P), DMX5206(P)
DMX7303	Control of Robotics Manipulators	DMX5201(P), DMX5403(P), MHZ5554 (P)
DMX7304	Factory Automation	DMX4409(P) OR EEX4436 (P) OR DMX5403(P)
DMX7305	Renewable Sources of Energy	MHZ4553(P), {[DMX3401(P) and EEX4542(P)] or [DMX4202(P) and DMX4203(P)]}

Curriculum for Mechatronics Engineering Specialisation

Compulsory Courses

Course		Prerequisites
Level 3		
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3302	Engineering Mechanics	MHZ3551(CR), MHZ3552(CR)
DMX3203	Introduction to Engineering Materials	None
DMX3304	Applied Electronics	EEX3410(CR)
DMX3305	Introduction to Engineering Design Graphics	None
DMX3206	Introduction to Manufacturing Processes	DMX3107(CR)
DMX3107	Workshop Practice	None
EEX3410	Introduction to Electrical Engineering	MHZ3552(CR)
EEX3417	Software Development for Engineers	AGM3203(CR)
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
DMX4409	Sensors	EEX3410(CA), DMX3304(CA), MHZ3551(CA), MHZ3552(CA)
DMX4410	Electrical & Pneumatic Machines	EEX3410(CA), DMX3304(CA), MHZ3551(CA), MHZ3552(CA)
DMX4204	Machine Dynamics	DMX3302(CA), MHZ3551(CA), MHZ3552(CA)
DMX4205	Strength of Materials I	DMX3302(CA), MHZ3551(CA), MHZ3552(CA)
DMX4306	Design of Machine Elements	DMX3302(CA), DMX3203(CA), DMX3305(CA)
DMX4411	Signal Processing	DMX3304(CA), MHZ3551(CA), MHZ3552(CA)
EEX4436	Microprocessors and Interfacing	{[EEX4351(CR), EEX3336(P), EEX3351(P)] or DMX3304(P)}, EEX3417(P), MHZ3551(P), AGM3203(P)
DMY4102	Group project (Mechatronics Engineering)	AGM3203(CA), DMX3305(CA)
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	18 credits (P)
DMW4802	Industrial Training (Mechatronics - Diploma)	38 credits at Level 3 (P), 20 credits in X category courses at Level 4 (CA)

Level 5		
DMX5201	Advanced Engineering Mechanics	DMX3302(P), DMX4205(CA), DMX4204(CA), MHZ3551(P), MHZ3552(P)
DMX5403	Control Systems Engineering	MHZ5554(CR), 30 credits in X category courses (P)
DMX5313	Power Electronics and Motor Drives	DMX3304(P), DMX4410(CA)
DMX5314	Machine Vision	MHZ4553(CA), DMX4409(CA)
DMX5315	Artificial Intelligence	DMX5403(CR), MHZ5554(CR)
DMX5316	Mechatronics Product Design	DMX3304(P), DMX4409(CA), DMX4410(CA)
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)

CVM5401	Accounting for Engineers	AGM4307(P)
Level 6		
DMX6180	Research Methodology and Project Identification (Mechanical/Mechatronics Engineering)	30 credits at Level 4 or above (P)
DMX6305	Modern Control Systems	DMX5403(CA), MHZ5554(CA)
DMX6306	Micro and Nano Electro Mechanical Systems	DMX3206(P),[DMX4307(P)] or DMX4410(P)] and MHZ4553(P)
DMM6601	Management for Engineers	CVM5401(CA), 60 credits(P)
DMW6802	Industrial Training (Mechatronics - Undergraduate)	DMX5201(P), DMX5403(P), DMX5313(P), DMX5314(CA), DMX5315(CA), DMX5316(CA)
Level 7		
DMX7303	Control of Robotics Manipulators	DMX5201(P), DMX5403(P), MHZ5554(P)
DMX7304	Factory Automation	DMX4409(P) OR EEX4436 (P) OR DMX5403(P)
DMX7306	Intelligent Control Systems	DMX6305(CR), DMX5315(CA), DMX5403(P)
DMY7881	Engineering Research Project (Mechatronics Engineering)	DMX6180(CA), 50 credits in X category courses (P)

Elective Courses

Course		Prerequisites
DMX5204	Materials Engineering	DMX3203(P)
DMX5211	Plant Maintenance	DMX3206(P), MHZ5554 (CR)
DMX5212	Computer Aided Design and Manufacturing	DMX4201(CA), DMX4212(CA)
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
DMX6303	Nano Technology	DMX3203(P), DMX3206(P), 60 Credits (P)
DMX6304	Computational Fluid Dynamics	MHZ4553(P), DMX5206(P)
DMX7301	Thermal Power Generation	[DMX4202(P) and DMX5205(CA)] or [DMX3401(P) and EEX5348(CA)]
DMX7305	Renewable Sources of Energy	MHZ4553 (P), {[DMX3401 (P) and EEX4542 (P)] or [DMX4202 (P) and DMX4203 (P)]}
DMX7402	Analysis of Manufacturing Systems	DMX3206 (P), MHZ5554(CA), 60 credits (P)

Curriculum for Textile and Clothing Engineering Specialisation

Compulsory Courses

Courses		Prerequisites
Level 3		
TAX3331	Garment Analysis and Sewing Machinery	None
TAX3458	Fibre Science and Technology	None
TAX3459	Yarn Manufacture I	None
EEX3410	Introduction to Electrical Engineering	MHZ3552(CR)
EEX3417	Software Development for Engineers	AGM3203(CR)
DMX3401	Fluid Mechanics and Thermodynamics	None
DMX3305	Introduction to Engineering Design Graphics	None
DMX3107	Workshop Practice	None
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
AGM3203	Communication Skills	None
Level 4		
TAX4539	Quality Assurance for Textile & Clothing	15 credits(P)
TAX4540	Garment Manufacture	TAX3331(CA), 15 credits (P)
TAX4560	Woven Fabric Technology	15 credits(P)
TAX4361	Knitting Technology	15 credits(P)
TAY4181	Group Project (Textile & Clothing Engineering)	15 credits(P)
MHZ4553	Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307	Economics and Marketing for Engineers	18 credits(P)
Level 5		
DMX5403	Control Systems Engineering	MHZ5554(CR), 30 credits(P) in X category courses
TAX5551	Textile Colouration	45 credits(P)
TAX5547	Plant Utilities	45 credits(P)
TAX5648	Fabric Structure and Analysis	45 credits(P)
TAX5349	Nonwoven Textiles	[TAX3458(P) or TAX3530(P)], 45 credits(P)
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307(P)
Level 6		
TAX6180	Research Methodology and Project Identification (Textile and Clothing Engineering)	45 credits(P) at level 4 and above
TAX6556	Ergonomics	45 credits(P) at level 4 and above
DMM6601	Management for Engineers	CVM5401(CA), 60 credits(P)

Level 7		
TAX7368	Specialty Fabrics	TAX4361(P), TAX4560(P), 45 credits(P) at level 4 and above
TAX7464	Yarn & Fabric Mechanics	TAX4560(P), MHZ3551(P), MHZ3552(P), 45 credits(P) at level 4 and above
TAX7369	Engineering Aspects of Weaving	TAX4560(P), 45 credits(P) at level 4 and above

| TAY7880 | Engineering Research Project (Textile & Clothing Engineering) | TAX6180(CA), 45 credits(P) at level 4 and above |
| TAY7381 | Comprehensive Design Project (Group project- Textile & Clothing Engineering) | TAX6180(CA), 45 credits(P) at level 4 and above |

Industrial Training (Select any 2 out of 5 training courses)		
TAW4401	Industrial Training I (Apparel)	TAX3331(P), TAX4438(CR), 15 credits(P)
TAW5403	Industrial Training II (Yarn Manufacture)	TAX3459(P), 15 credits(P)
TAW5404	Industrial Training II (Weaving)	TAX4560(P), 15 credits(P)
TAW5405	Industrial Training II (Chemical Processing)	TAX5551(CR) or TAX4571(P), 15 credits(P)
TAW5406	Industrial Training II (Knitting)	TAX4361(P) , 15 credits(P)

Elective Courses

Courses		Prerequisites
TAX4462	Pattern Development	15 credits(P)
TAX4438	Production Planning and organisation	15 credits(P)
TAJ5353	History and Traditions of Clothing	45 credits(P)
TAX6454	Technical Textiles	45 credits(P) at level 4 and above
TAX6263	Textile Product Engineering	45 credits(P) at level 4 and above
TAX6265	Advanced Weaving Preparation and Machinery	TAX4560(P), 45 credits (P) at level 4 and above
DMX6301	Industrial Engineering	MHZ4553 (P), 60 credits (P)
TAX6366	Yarn Manufacture II	TAX3459(P), 45 credits(P) at level 4 and above,
TAX6367	Advanced Colouration	[TAX4571(P) or TAX5551(CA)], 45 credits (P) at level 4 and above,
TAX6368*	Nano Technology for Textiles	45 credits (P) at level 4 and above, [TAX5551(CA) or TAX4571(P)], [TAX3458(P) or TAX3530(P)]

*Not offered in 2023/2024

Excluded Combinations

TAX6368 and DMX6303

Exemptions applicable for Bachelor of Science Honours in Engineering Study Programme

Qualifications in English Language

Qualification	Course exempted
GCE (A/L) – Simple pass in General English , or any recognized qualification in Science or Technology/Engineering, at the level of Diploma or Degree, the medium of instruction being English (verification needed)	VTL2001

Qualifications in Mathematics

Qualification	Level 3	Level 4	Level 5
BSc with Mathematics at the final year BSc with Applied Mathematics and Pure Mathematics at the final year	MHZ3551 MHZ3552		
BSc Special Degree in Mathematics	MHZ3551 MHZ3552	MHZ4553	MHZ5554

Qualifications in Civil Engineering and Related Disciplines

Qualification	Courses		
	Level 3	Level 4	Level 5
NCIT (Civil)	CVX3441 DMX3107		
NAB (Civil)	EEX3410 DMX3401 DMX3305 DMX3107 AGM3203		
Diploma in Civil Engineering, GITI	CVX3442 CVX3340	CVX4342	
HNDE (Civil)	EEX3410 MHZ3551 DMX3305 MHZ3552 AGM3203 CVX3441 DMX3401 CVX3442 CVX3340 DMX3107	CVX4342 CVW4802	
NDET (Civil)	EEX3410 MHZ3551 DMX3305 MHZ3552 AGM3203 CVX3441 DMX3401 CVX3442 CVX3340 DMX3107	CVX4342 CVW4802	
*NDT (Civil) or NDES (Civil)	EEX3410 MHZ3551 DMX3305 MHZ3552 AGM3203 CVX3441 DMX3401 CVX3442 CVX3340 DMX3107	CVX4342 CVW4802	
BSc (Civil Eng.), General Sir John Kothalawala Defence Academy	EEX3410 MHZ3551 DMX3305 MHZ3552 AGM3203 CVX3441 DMX3401 CVX3442 CVX3340 DMX3107	CVX4342 CVX4343 CVX4545 CVX4546 CVX4348	CVX5440
BSc (Surveying Science), Institute of Surveying & Mapping, Diyatalawa	MHZ3551 EEX3410 MHZ3552 CVX4342		CVX5440

*Exemptions for NDT from 2022 are being reviewed, and will be available at the time of registration.

Qualifications in Electrical/Electronic/Communications/ Computer Engineering/ IT and related disciplines

Qualification	Courses		
	Level 3	Level 4	Level 5/6
NCT (Electrical and Electronics)	EEX3410		
NCIT (Electrical and Electronics)	EEX3410 EEX3336 EEX3331 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332	
NAB Special Apprentice (AIT) – Electrical/Electronic	EEX3410 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEW4401 or EEW4403	
Diploma in Electronics and Communications, Jaffna College Institute of Technology	DMX3305, AGM3203 EEX3410, EEX3336 EEX3331, (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332	
Diploma in Computer System Design, (NIBM)	EEX3336, EEX3262, EEX3266,	EEX4347 EEX4362	
Advanced Technician Diploma in Electrical and Electronic Engineering (Level 5 IVQ)	EEX3410		
Higher Diploma in Computer based Information Systems (NIBM)	EEX3269	EEX4366 EEX4435 EEY4181	EEX5467
Higher National Diploma in IT, Advanced Technological Institute	EEX3336	EEX4435 EEX4347	
NDT (Electrical) or NDES (Power) or HNDE (Electrical Power)	EEX3410 DMX3305 AGM3203 DMX3401 EEX3331 MHZ3551 MHZ3552 DMX3107	EEX4331 EEX4332 or (EEX4532 & EEX4448) {EEW4403 or (EEW4301 and EEW4502)}	
HNDE (Electrical Power) New curriculum from 2014	EEX3410 DMX3305 AGM3203 DMX3401 EEX3417 EEX3331 MHZ3551 MHZ3552 DMX3107 EEX3336 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 or (EEX4532 & EEX4448) {EEW4403 or (EEW4301 and EEW4502)} {EEY4182 or EEY4183}	
National Diploma in Technology (NDT) – Electronics and Telecommunications with Electrical Installations & Wiring Diagrams		EEX4434	
NDT++ (Electrical) (2014-2021)	EEX3410 DMX3305 AGM3203	EEX4331 EEX4332 or (EEX4532 &	

Qualification	Courses		
	Level 3	Level 4	Level 5/6
	DMX3401 EEX3331 EEX3336 MHZ3551 MHZ3552 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4448) EEX4434 EEX4436 { EEW4403 or (EEW4301 and EEW4502)}	
NDES* (Power) (New curriculum)	EEX3410 DMX3305 AGM3203 DMX3401 EEX3331 EEX3336 MHZ3551 MHZ3552 DMX3107 EEX3417 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 or (EEX4532 & EEX4448) EEX4434 EEX4436 {EEW4403 or (EEW4301 and EEW4502)} {EEY4182 or EEY4183}	
NDT (Electronic & telecom.)++ or NDES (Electronics) or NDES (Telecommunication)	EEX3331 EEX3410 DMX3305 AGM3203 DMX3401 EEX3336 MHZ3551 MHZ3552 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 EEX4436 {(EEW4301 or EEW4403) and EEW5403}	
NDES* (Electronics) or NDES *(Telecommunication) (New curriculum)	EEX3410 EEX3417 DMX3305 AGM3203 DMX3401 EEX3331 EEX3336 MHZ3551 MHZ3552 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 EEX4330 EEX4436 {(EEW4301 or EEW4403) and EEW5403} (EEY4183 or EEY4182)	
HNDE (Electronics) – Before 2014	EEX3410 DMX3305 AGM3203 DMX3401 EEX3336 MHZ3551 MHZ3552 DMX3107 EEX3331 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4330 {(EEW4301 or EEW4403) and EEW5403}	

Qualification	Courses		
	Level 3	Level 4	Level 5/6
HNDE (Electronics) New curriculum from 2014	EEX3410 DMX3305 AGM3203 DMX3401 MHZ3551 MHZ3552 EEX3336 DMX3107 EEX3331 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 EEX4330 {(EEW4301 or EEW4403) & EEW5403} (EEY4183 or EEY4182)	
National Diploma in Engineering Technology (NDET)- Electrical/Electronic	EEX3410 DMX3305 AGM3203 DMX3401 EEX3336 DMX3107 (EEX3351 & EEX4351) or DMX3304		

Note: Those who have satisfied only the academic requirements without industrial training components in NDT (Electrical), NDT (Electronic & telecom.), HNDE (Electrical Power) and HNDE (Electronics) can be granted exemptions as listed, but without relevant Industrial training courses at Levels 4 and 5.
*Effective year 2003 onwards   **Effective year 2008 onwards
++Exemptions for NDT from 2022 are being reviewed, and will be available at the time of registration.

Qualifications in Mechanical/ Automobile/ Manufacturing/ Marine/ Aeronautical/ Nautical/Chemical engineering and related disciplines

Qualification	Courses		
	Level 3	Level 4	Level 5
German Training School- Full Certificate **or** Full Certificate of Basic Training Programme conducted by the Training Schools of Central Transport Board (Werahara/Borella)	DMX3107		
National Certificate for Industrial Technicians (NCIT) (Mechanical)	AGM3203 DMX3206 DMX3107 DMX3305 DMX3203 DMX3401	DMX4201	
NDT (Mechanical)	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205 DMX4208 DMX4212 DMW4801 or DMW4802	
NDT (Chemical)	AGM3203 DMX3305 DMX3107 EEX3410 DMX3203 DMX3401 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205	

Qualification	Courses		
	Level 3	Level 4	Level 5
NDT (Marine)	AGM3203 DMX3305 DMX3107 EEX3410 DMX3203 DMX3401 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205	
NDT (Nautical studies & technology)	AGM3203 DMX3401 DMX3107 EEX3410 DMX3302 DMX3305	DMX4204 DMX4205	
NDES (Mechanical - General)	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205 DMX4212 DMW4801 or DMW4802	
HNDE (Mechanical)-Production Engineering	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205 DMX4212 DMW4801 or DMW4802	
HNDE (Mechanical)-Automobile Engineering	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205 DMX4208 DMW4801 or DMW4802	
HNDE (Mechanical)-Refrigeration and Air conditioning	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205 DMW4801 or DMW4802	
NDES (Automobile)	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205 DMX4208 DMW4801 or DMW4802	
NDES (Marine)	AGM3203 DMX3305 DMX3107 DMX3401 DMX3203 EEX3410 DMX3206 MHZ3551 DMX3302 MHZ3552 DMX3304	DMX4201 DMX4204 DMX4205	
BSc (Defense studies) in Aeronautical Engineering	AGM3203 DMX3401 DMX3107 EEX3410 DMX3304 MHZ3551		

Qualification	Courses		
	Level 3	Level 4	Level 5
	DMX3305 MHZ3552		

Note: Those who have satisfied **only the academic requirements** without industrial training components in NDT (Mechanical) and HNDE (Mechanical) could be granted exemptions as listed above, but without the relevant **Industrial training** modules at Levels 4 and 5
*Exemptions for NDT from 2022 are being reviewed, and will be available at the time of registration.

Qualifications in Textile and Clothing Engineering and related discipline

Qualification	Courses		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 (and 6)
Certificate in Textile Technology (One year Fulltime), Textile Training & Services Centre, Ratmalana	TAX3458 TAX3459	TAX4560 TAX5551	
Certificate in Textile Technology (One year Fulltime) and Diploma in Technology (Extension Course), Textile Training & Services Centre, Ratmalana	TAX3458 TAX3459 TAX3331	TAX4560 TAX5551	
Certificate in Textile Dyeing and Printing (Part time) from the Textile Training and Services Centre, Ratmalana			TAX5551
Diploma in Textile and Apparel Technology (Part time) , Sri Lanka Institute of Textile and Apparel (SLITA), Rathmalana			TAX5551
Diploma in Textile and Apparel Technology (Full time), Sri Lanka Institute of Textile and Apparel (SLITA), Ratmalana	TAX3458 TAX3459 TAX3331	TAX4539 TAX4540 TAX4438 TAX4462	TAX5551 TAX5648
Diploma in Textile Technology from the Textile Training and Services Centre, Ratmalana	TAX3458 TAX3459 TAX3331	TAX4560	TAX5551
Diploma in Clothing Technology from the Clothing Industry Training Institute, Ratmalana	TAX3331	TAX4438 TAX4539 TAX4462 TAW4401	
Certificate in Textile Colouration and Finishing (Part time) and Diploma in Textile Colouration and Finishing (Part time) from the Textile Training and Services Centre, Ratmalana	TAX3458		TAX5551
Certificate in Garment Production Management (Part time) from Clothing Industry Training Institute, Ratmalana	TAX3331		
College Diploma in Clothing Technology and Management (Fulltime), Brandix College of Clothing Technology, Ratmalana	TAX3331	TAX4539 TAX4438 TAX4540 TAX4462 TAW4401	TAX5648

Qualification	Courses		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 (and 6)
NDT (Textile) (Old Curriculum-till 2007)	DMX3305 AGM3203 DMX3401 EEX3410 MHZ3551 MHZ3552 TAX3458 TAX3459 (TAX5648 or TAX3331) DMX3107	TAX4539 TAX4560	TAX5551 Any two of TAW5403, TAW5404, TAW5405, TAW5406
NDT (Textile) (Old Curriculum-till 2007) without completion of training	DMX3305 AGM3203 DMX3401 EEX3410 MHZ3551 MHZ3552 TAX3458 TAX3459 (TAX5648 or TAX3331)	TAX4539 TAX4560	TAX5551
NDT (Clothing) (Old Curriculum-till 2007)	DMX3305 AGM3203 DMX3401 EEX3410 MHZ3551 MHZ3552 TAX3458 TAX3459 DMX3107 (TAX5648 or TAX3331)	TAX4539 TAX4540 TAX4438 TAX4462 Any two of TAW4401 TAW5403 TAW5404 TAW5405 TAW5406	TAX5551
NDT (Clothing) (Old Curriculum-till 2007) without completion of training	DMX3305 AGM3203 DMX3401 EEX3410 MHZ3551 MHZ3552 TAX3458 TAX3459 (TAX5648 or TAX3331)	TAX4539 TAX4540 TAX4462 TAX4438	TAX5551
*NDT (Textile and Clothing Technology)- From 2007 to 2021	DMX3305 AGM3203 DMX3401 EEX3410 MHZ3551 MHZ3552 TAX3458 TAX3459	TAX4539 TAX4540 TAX4560 DMX4204 TAX4438 TAX4462 Any two of TAW4401 TAW5403	TAX5648 TAX5551

Qualification	Courses		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 (and 6)
	TAX3331 DMX3302 DMX3107	TAW5404 TAW5405 TAW5406	
*NDT(Textile and Clothing Technology) – From 2007 to 2021 without completion of training	DMX3305 AGM3203 DMX3401 EEX3410 MHZ3551 MHZ3552 TAX3458 TAX3459 TAX3331 DMX3302	DMX4204 TAX4539 TAX4540 TAX4438 TAX4560 TAX4462	TAX5648 TAX5551
NDT (Polymer Technology)	DMX3305 AGM3203 DMX3401 DMX3206 DMX3203 DMX3302 EEX3410 MHZ3551 MHZ3552 DMX3107	DMX4204 DMX4201	
Diploma in Clothing Manufacture – CITI, Ratmalana	TAX3331	TAX4539 TAX4438 TAW4401	TAW5401
Diploma in Polymer Technology – CITI, Ratmalana		TAX4539	
TAI3540- Pattern construction and TAI5538 – Advanced pattern construction, OUSL		TAX4462	

*Exemptions for NDT from 2022 are being reviewed, and will be available at the time of registration.

Licentiateship of Textile Institute (LTI) Examination /Associate ship of Textile Institutes (ATI) Technology Group Examination

Subject	Level 3	Level 4	Level 5
Paper 2 in LTI/Paper 2(a) in ATI – Fibre Technology and Textile Science	TAX3458		
Paper 3 in LTI /Paper 2 (b) in ATI – Yarn Technology and Yarn preparation	TAX3459		
Paper 4 in LTI /Paper 2 (c) in ATI- Fabric technology		TAX4560	TAX5648
Paper 5 in LTI /Paper 2 (d) in ATI-Dyeing and Finishing Technology			TAX5551
Paper 6 in LTI – Textile Testing		TAX4539	
Paper 11 in LTI – Garment Technology	TAX3331		

Degree of Bachelor of Industrial Studies Honours - Study Programme

Aim of the Study Programme

The aim of the study programme is to provide access, for the right candidates, to a programme with outstanding and up-to-date academic content delivered within a well-planned curriculum with high flexibility in course selection. The programme focuses on theoretical & practical aspects and emerging subject areas in the industry, related to the discipline, and disseminates essential knowledge and skills in the Agriculture, Apparel, Fashion and Textile disciplines utilising distance learning pedagogy. The study programme also gives due consideration to social and environmental impacts, and open avenues for the students to undertake postgraduate studies and research as career options.

Study Programme Educational Outcomes

To produce competent graduates, who

- Apply the theoretical and practical knowledge, skills and cutting-edge technology of the relevant discipline for the betterment of industry and/or the relevant filed.

- Are confident in solving issues and problems relevant to the discipline in innovative and creative manner being conscious of the society and the environment.

- Are capable of presenting arguments and ideas in both technical and non-technical environments effectively in oral, visual and written forms to diverse audiences.

3.2 Bachelor of Industrial Studies Honours Study Programme

The Bachelor of Industrial Studies Honours Degree programme of the OUSL is carefully designed in accordance to the requirements of the Sri Lanka Qualification Framework (SLQF) especially for persons presently employed in middle level management /technical grades in various industries.

It is also possible for a student to obtain a Higher Diploma in an approved Industrial Studies discipline after successful completion of a required combination of courses and credit requirements.

Duration

The minimum duration of the Degree programme starting from level 3 is 4 years and the maximum number of years a student can spend to complete the degree programme is twelve (12).

Medium of instruction

The medium of instruction is English.

Areas of Specialisations

- Agriculture
- Apparel Production and Management
- Fashion Design and Product Development
- Textile Manufacture

Eligibility for Admission

A person seeking admission to the programme leading to the award of the Degree of Bachelor of Industrial Studies Honours in the specialisations in Apparel Production and Management, or Textile Manufacture or Fashion Design and Product Development shall be required to have,

- Obtained three passes at the General Certificate of Education (Advanced Level) Examination, Sri Lanka, in one and the same sitting or,
- Obtained a minimum three (3) credit (C) passes in any 3 subjects in Cambridge International/Edexcel Advanced Level Examination within three years or,

- Completed the Certificate in Industrial Studies in Apparel technology offered by the Open University of Sri Lanka or,
- Completed the Advanced Certificate in Industrial Studies in Apparel Technology offered by the Open University of Sri Lanka or,
- Obtained the Advanced Certificate in Apparel Technology offered by the Open University of Sri Lanka or
- Completed all courses of any foundation Programme offered by The Open University of Sri Lanka or,
- Obtained the Advanced Certificate in Science with courses from any three (3) disciplines offered by the Open University of Sri Lanka or,
- Secured an equivalent or higher qualification acceptable to the Senate.

A person seeking admission to the programme leading to the award of the Degree of Bachelor of Industrial Studies Honours in the specialisation in Agriculture shall be required to have,

- Obtained three (03) passes from Biology, Chemistry, Physics or Agriculture at the General Certificate in Education (Advanced Level) Examination, Sri Lanka in one and same sitting, or
- Obtained a minimum three (3) credit (C) passes for Biology, Physics and Chemistry in Cambridge International/Edexcel Advanced Level Examination within three years or,
- Obtained the Advanced Certificate in Science with courses in the disciplines of Biology, Physics and Chemistry offered by the Open University of Sri Lanka or,
- Obtained an equivalent or higher qualification acceptable to the Senate.

Requirements for the award of the Degree

In order for a student to qualify for the award of the Degree of Bachelor of Industrial Studies Honours, He/She has to meet the following requirements [within a maximum of twelve (12) academic years].

(1) Successful completion of all compulsory courses for the selected specialisation

(2) Fulfil the level-wise and category-wise course credit requirement as given in Table 3

Table 3 – Course credit requirements for the award of Bachelor of Industrial Studies Honours Degree

Category	Minimum credits	Maximum credits
Engineering (X) / Industrial (I)	74 Subject to a minimum of 30 at Level 5 and above of which at least 12 at level 6	88 Subject to a minimum of 30 at Level 5 and above of which at least 12 at level 6
Projects (Y)	8 Minimum of 8 credits at level 6	11 Minimum of 8 credits at level 6
Mathematics (Z)	8	10
General (J)	5	6
Management (M)	10	15
Industrial Training (W)	8	8
Computer literacy (K)	2	2
Total	130 Subject to a minimum of 60 at Level 5 or above, of which at least 30 at Level 6	

Requirements for the award of the Higher Diploma

In order for a student to qualify for the award of the Higher Diploma in Industrial Studies, s/he has to meet the following requirements within a maximum of 12 academic years.

(1) Obtain passes for all compulsory courses of levels 3 and 4 for the specialisation, and

(2) Fulfil Level-wise and Category-wise Credits for the Higher Diploma as given Table 4

(3) Pass all Level 3 & 4 Compulsory courses

Table 4 - Course credits requirements for the Award of Higher Diploma in Industrial Studies

Category	Minimum credits	Maximum credits
Engineering (X) / Industrial (I)	42 Subject to a minimum of 15 at Level 4 and above	46 Subject to a minimum of 15 at Level 4 and above
Mathematics (Z)	5	9
General (J)	0	4
Management (M)	7	11
Industrial Training (W)	8	8
Computer literacy (K)	2	2
Total	68 Subject to a minimum of 30 at Level 4	

Grade Point Average (GPA)

The GPA will be computed by considering the courses at levels 4, 5 and 6 totalling to 74 credits. In selecting the courses for 74 credits the following sequence will be followed.

(1) Compulsory courses at levels 5 and 6

(2) Elective courses at levels 5 and 6

(3) Compulsory courses at level 4

In a situation, where exactly seventy-four (74) credits cannot be obtained, the courses are selected to the nearest value below seventy-four (74), and the remainder credit is taken as a Part Credit of the next course.

The Grade Point Average (GPA) is computed as follows:

$$GPA = \frac{\{\sum (Credit\ Rating\ of\ the\ Course) * (GPV) + (Part\ Credit\ of\ the\ Course) * (GPV)\}}{74}$$

> ### *Students are required to apply in a prescribed form after completing the award requirements to receive the Higher Diploma or the Degree*

Limits for Exemptions

Notwithstanding any exemptions granted for prior qualifications, a student shall acquire, by successful completion in accordance with the Scheme of Assessment, a minimum number of credits as shown below for the awards.

For Degree:

Minimum credit requirements a student shall acquire by successful completion in accordance with the Scheme of Assessment for the award of the Honours Degree are as given below.

- Level 6 (considering all Categories): 15
- Level 6 (considering X, I and Y categories): 10
- Levels 5 and 6 (considering all Categories): 30
- Levels 5 and 6 (considering X, I and Y Categories): 19
- Total (considering all Categories and all levels from 3 to 6): 65

For Higher Diploma:

Minimum credit requirements a student shall acquire by successful completion in accordance with the Scheme of Assessment for

- Level 4 (considering all Categories): 15
- Level 4 and above (considering X and I Categories): 8
- Total (considering all Categories and all levels from 3 to 6): 34

A list of qualifications for which exemptions could be claimed is given later in this document.

Curricula for different specialisations

The curriculum of the Programme of Study leading to the awards of Bachelor of Industrial Studies Honours in an approved industrial studies discipline and the Higher Diploma has been revised to comply with the Sri Lanka Qualification Framework.

This Section gives the combination of courses for the following specialisations of the Bachelor of Industrial Studies Honours Degree

- Agriculture
- Apparel Production and Management
- Fashion Design and Product Development
- Textile Manufacture

the award of the Higher Diploma in Industrial Studies are as given below.

Curriculum for Agriculture Specialisation

Compulsory Courses

Courses		Pre-requisites
Level 3		
AGI3450	Land and Soil Tillage Management	None
AGI3551	Agricultural Biology	None
AGI3552	Crop Production and Technology	None
AGI3553	Plant Protection	None
AGM3203	Communication Skills	None
AGM3354	Principles of Economics	None
MHZ3458	Mathematics for Agriculture	None
TAK3237	Introduction to Computer Applications	None
Level 4		
AGI4555	Irrigation and Drainage Engineering	AGX4356 (CR)
AGI4559	Food and Nutrition	None
AGI4460	Animal Husbandry & Production	None
AGI4561	Postharvest Biology and Technology	AGI3551(P)
AGI4362	Environmental Agriculture	AGI3551(P), AGX4356(CR)
AGX4356	Soil Science	None
AGM4363	Agricultural Marketing	None
MHZ4357	Applied Statistics	Pass in 15 credits in level 3, MHZ3458(CA)
Level 5		
AGI5364	Farm Power and Machinery	AGI3450 (P)
AGI5166	Research Methodology	MHZ3458(P), MHZ4357(P), AGZ5367(CR), Pass in 68 credits
AGX5565	Soil Plant and Water Relationship	AGX4356(P)
AGZ5367	Experimental Design	MHZ3458(P) and MHZ4357(CA)
AGJ5368	Indigenous Knowledge of Herbal Products	Pass in 45 credits
Level 6		
AGI6478	Hydrology and Water Resources	AG14555(P), AGX5565(CR)
AGM6379	Agricultural Extension	Pass in 45 credits
AGJ6381	Rural Sociology	Pass in 45 credits
AGY6880	Individual Project (Agriculture)	MHZ3458(P), MHZ4357(P), AGZ5367(CR), AGI5166 (CA), Pass in 30 credits at level 5 or above.
Industrial Training		
AGW4401	Industrial Training I (Agriculture)	AGI3551(P), AGI3552(P), Pass in 15 credits at level 3 or above
AGW5401	Industrial Training II (Agriculture)	AGW4401(CR), Pass in 15 credits at level 4 or above

Elective Courses

Courses		Prerequisites
AGI5569	Molecular Biology and Biotechnology	AGI3551(P)
AGI5470	Food Microbiology	AGI4559(P)
AGI5471	Animal Biology	None
AGI5572	Fisheries and Aquaculture	None
AGI5373	Agro-Forestry	AGI3551(P), AGX4356(P)
AGI5274	Fruit Crops and Cut Flower Production	AGI3553(P), AGI3551(P)
AGX5415	Horticulture and Landscape Technology	AGI3553(P)
AGX5376	Crop Processing	AGI3552(P), AGI4561(P)
AGX5277	Food Safety and Quality Management Systems	AGI4559(P), AGI4561(P)
AGM5475	Economics and Management	AGM3354(P), MHZ3458(P)
AGI6582	Food Processing	AGI4559(P)
AGI6585	Applications in Biotechnology	AGI5569(P)
AGI6486	Field and Laboratory Techniques in Plant Protection	AGI3553(P)
AGX6283	Ground Water and Resource Management	AGX5565(CA), AGX4356(P)
AGX6284	Impacts of Climate Change on Water Resources	AGX5565(CR) and AGX6283 (CR)
AGX6387	Plantation Crop Technology	AGI3552(P)
AGX6490	Soil and Water Conservation	AGX4356(P), AGX5565(CR)
AGX6377*	Precision Agriculture	68 Credits (P)

* Not offered in 2022/23

Curriculum for Apparel Production & Management Specialisation

Compulsory Courses

Course		Prerequisites
Level 3		
TAX3530	Fibre to Fabric	None
TAX3331	Garment Analysis and Sewing Machinery	None
TAI3332	Garment Accessories	None
TAI3533	Pattern Construction	None
TAM3234	Basics of Human Resource Management	None
TAM3535	Management Studies	None
MHZ3576	Statistics for Industrial Studies	None
TAK3237	Introduction to Computer Applications	None
Level 4		
TAX4438	Production Planning and Organization	15 credits(P)
TAX4539	Quality Assurance for Textile and Clothing	15 credits(P)
TAX4540	Garment Manufacture	15 credits(P), TAX3331(CA)
TAX4441	Knitted Garment Technology	15 credits(P)
TAI4442	Advanced Pattern Construction	15 credits(P), TAI3533(P)
TAI4243	Foundation Garments	15 credits(P), TAX3530(CA), TAI3533(CA) and TAX4540(CR)
TAI4344	Industrial Garment Washing and Finishing	15 credits(P)
TAM4445	Apparel Merchandising	15 credits(P)
TAW4401	Industrial Training I (Apparel)	TAX3331(P), TAX4438(CR), 15 credits(P)
Level 5		
TAI5246	Current Topics in Textile and Clothing	45 credits(P)
TAX5547	Plant Utilities	45 credits(P)
TAX5648	Fabric Structure and Analysis	45 credits(P)
TAX5349	Nonwoven Textiles	45 credits(P), [TAX3458(P) or TAX3530(P)]
MHZ5570	Quantitative Techniques	45 credits(P), MHZ3576(P)
TAW5401	Industrial Training II (Apparel)	TAW4401(CR), TAX4540(CA), 15 credits(P) at level 4 and above
Level 6		
TAX6455	Fabric Technology	45 credits(P) at level 4 and above
TAX6556	Ergonomics	45 credits(P) at level 4 and above
TAX6454	Technical Textiles	45 credits(P) at level 4 and above
TAX6263	Textile Product Engineering	45 credits(P) in level 4 and above
TAM6457	Fashion Marketing	45 credits(P) at level 4 and above
TAY6882	Research Project (Apparel Production)	45 credits(P) at level 4 and above, TAI5246(CA)

Elective Courses

Courses		Prerequisites
LLJ3245	Introduction to Laws of Sri Lanka	None
MHJ4241	History of Technology	20 credits(P)
TAX5551	Textile Colouration	45 credits(P)
TAI5552	Principles of Fashion Design	45 credits(P)
MHJ5343	Nature of Science	45 credits(P)
MHJ5342	Technology, Society and Environment	45 credits(P)
TAJ5353	History and Traditions of Clothing	45 credits(P)
TAX6367	Advanced Colouration	45 credits(P) at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368*	Nano Technology for Textiles	45 credits(P) at level 4 and above, [TAX3458(P) or TAX3530(P)], [TAX5551(CA) or TAX4571(P)]

*Not offered in 2023/2024

Excluded Combinations

TAX3458 and TAX3530	TAI4371 and TAI5552
TAX3370 and TAX5551	TAI4472 and TAI5552
TAX4571 and TAX5551	MHZ3576 and TAZ3536
MHZ5570 and TAZ5550	

Curriculum for Fashion Design and Product Development Specialisation

Compulsory Courses

Courses	Prerequisites
Level 3	
TAX3530 Fibre to Fabric	None
TAX3331 Garment Analysis and Sewing Machinery	None
TAI3332 Garment Accessories	None
TAI3533 Pattern Construction	None
TAM3234 Basics of Human Resource Management	None
TAM3535 Management Studies	None
MHZ3576 Statistics for Industrial Studies	None
TAI3270 Fashion Illustration I	None
TAK3237 Introduction to Computer Applications	None
Level 4	
TAX4539 Quality Assurance for Textile and Clothing	15 credits(P)
TAX4540 Garment Manufacture	15 credits(P), TAX3331(CA)
TAI4371 Concepts of Fashion	15 credits(P)
TAI4472 Concepts of Fashion Designing	15 credits(P)
TAI4373 Fashion Illustration II	15 credits(P), TAI3270(CA)
TAI4474 Process of Fashion Designing	15 credits(P), TAI4472(CR)
TAI4442 Advanced Pattern Construction	15 credits(P), TAI3533(P)
TAI4243 Foundation Garments	15 credits(P), TAX3530(CA), TAI3533(CA) and TAX4540(CR)
TAW4402 Industrial Training I (Fashion)	TAI4371(CR), TAI4472(CR), TAX3331(P), Pass in 15 credits
Level 5	
TAI5375 Design Through Draping	45 credits(P), TAI3533(P)
TAI5478 Fashion Design Development	45 credits(P), TAI4373(P)
TAI5579 Theoretical aspects of visual presentation and exhibition design	45credits(P), TAI5478(CR)
MHZ5570 Quantitative Techniques	45 credits(P), MHZ3576 (P)
TAY5384 Inspiration of Fashion Designing	45 credits(P), TAI4373(CA), TAI4474(CA)
TAW5402 Industrial Training II (Fashion Design & Product Development)	TAW4402(CR), TAX4540(CA), TAI4474(CA), 15 credits(P) at level 4 or above
Level 6	
TAM6457 Fashion Marketing	45 credits(P) at level 4 and above
TAX6556 Ergonomics	45 credits(P) at level 4 and above
TAY6885 Creating and exhibiting fashion products	TAY5384(P), TAI5579(CA), 45 credits(P) at level 4 and 5
TAI6580 Fashion Show Production	45 credits(P) at level 4 and above, TAI4474(P)

Elective Courses

Courses		Prerequisites
LLJ3245	Introduction to Laws of Sri Lanka	None
MHJ4241	History of Technology	20 credits(P)
TAX5551	Textile Colouration	45 credits(P)
TAI5376	Computer Aided Pattern Drafting	45 credits(P), TAI3533(P)
TAI5277	Computer Aided Fashion Illustration	45 credits(P), TAI4472(CA), TAI4373(CA)
MHJ5343	Nature of Science	45 credits(P)
MHJ5342	Technology, Society and Environment	45 credits(P)
TAJ5353	History and Traditions of Clothing	45 credits(P)
TAX6455	Fabric Technology	45 credits(P) at level 4 and above
TAX6454	Technical Textiles	45 credits(P) at level 4 and above
TAX6263	Textile Product Engineering	45 credits(P) at level 4 and above
TAX6367	Advanced Colouration	45 credits(P) at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368*	Nano Technology for Textiles	45 credits(P) at level 4 and above, [TAX3458(P) or TAX3530(P)], [TAX5551(CA) or TAX4571(P)]

*Not offered in 2023/2024

Excluded Combinations

TAX3458 and TAX3530	TAI4371 and TAI5552
TAX3370 and TAX5551	TAI4472 and TAI5552
TAX4571 and TAX5551	MHZ3576 and TAZ3536
MHZ5570 and TAZ5550	

Curriculum for Textile Manufacture Specialisation

Compulsory Courses

Courses		Prerequisites
Level 3		
TAX3458	Fibre Science & Technology	None
TAX3459	Yarn Manufacture I	None
TAX3370	Textile Preparation	None
TAX3331	Garment Analysis and Sewing Machinery	None
TAI3332	Garment Accessories	None
MHZ3576	Statistics for Industrial Studies	None
TAM3234	Basics of Human Resource Management	None
TAM3535	Management Studies	None
TAK3237	Introduction to Computer Applications	None
Level 4		
TAX4539	Quality Assurance for Textile and Clothing	15 credits(P)
TAX4540	Garment Manufacture	15 credits(P), TAX3331(CA)
TAX4560	Woven Fabric Technology	15 credits(P)
TAX4361	Knitting Technology	15 credits(P)
TAX4571	Textile Colouration and Finishing	15 credits(P), TAX3370(CA)
TAI4344	Industrial Garment Washing and Finishing	15 credits(P)
TAM4445	Apparel Merchandising	15 credits(P)
Level 5		
TAX5648	Fabric Structure and Analysis	45 credits(P)
TAX5349	Nonwoven Textiles	45 credits(P), TAX3458(P) or TAX3530(P)
TAX5547	Plant Utilities	45 credits(P)
TAI5246	Current topics in Textile and Clothing	45 credits(P)
TAI5552	Principles of Fashion Design	45 credits(P)
MHZ5570	Quantitative Techniques	45 credits(P), MHZ3576 (P)
Level 6		
TAX6556	Ergonomics	45 credits(P) at level 4 and above
TAX6263	Textile Product Engineering	45 credits(P) at level 4 and above
TAY6883	Research Project (Textile Manufacture)	45 credits(P) at level 4 and above, TAI5246(CA)

Elective courses

Courses		Prerequisites
LLJ3245	Introduction to Laws of Sri Lanka	None
MHJ4241	History of Technology	20 credits(P)
TAX4438	Production Planning and Organisation	15 credits (P)
MHJ5343	Nature of Science	45 credits(P)
MHJ5342	Technology, Society and Environment	45 credits(P)
TAJ5353	History and Traditions of Clothing	45 credits(P)
TAM6457	Fashion Marketing	45 credits(P) at level 4 and above
TAX6454	Technical Textiles	45 credits(P) at level 4 and above
TAX6265	Advanced Weaving Preparation and Machinery	45 credits(P) at level 4 and above, TAX4560(P)
TAX6366	Yarn Manufacture II	45 credits(P) at level 4 and above, TAX3459(P)
TAX6367	Advanced Colouration	45 credits(P) at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368*	Nano Technology for Textiles	45 credits(P) at level 4 and above, [TAX3458 (P) or TAX3530(P)], [TAX5551(CA) or TAX4571(P)]

*Not offered in 2023/2024

Industrial Training

Industrial Training (Select any 2 out of 5 training courses)		
TAW4401	Industrial Training I (Apparel)	TAX3331(P), TAX4438(CR), 15 credits(P)
TAW5403	Industrial Training II (Yarn Manufacture)	TAX3459(P), 15 credits(P)
TAW5404	Industrial Training II (Weaving)	TAX4560(P), 15 credits(P)
TAW5405	Industrial Training II (Chemical Processing)	TAX5551(CR) or TAX4571(P), 15 credits(P)
TAW5406	Industrial Training II (Knitting)	TAX4361(P) , 15 credits(P)

Excluded Combinations

TAX3458 and TAX3530   TAI4371 and TAI5552

TAX3370 and TAX5551   TAI4472 and TAI5552

TAX4571 and TAX5551   MHZ3576 and TAZ3536

MHZ5570 and TAZ5550

Exemptions applicable for Industrial Studies Study Programme

Qualifications in English Language

Qualification	Course exempted
GCE(A/L) – Simple pass in General English, or any recognised qualification in Science or Technology/Engineering, at the level of Diploma or Degree, the medium of instruction being English (verification needed)	VTL2001

Qualifications in Textile/Apparel and related disciplines

[Applicable for Honours Degree in Industrial Studies – Apparel Production and Management, Textile Manufacture and Fashion Design and Product Development]

Qualification	Courses exempted		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 & 6
Certificate in Textile Technology (One year Fulltime) and Diploma in Technology (Extension Course), Textile Training & Services Centre.	TAX3458 TAX3530 TAX3331 TAX3459 [TAX3370 and TAX4571] or TAX5551	TAX4560	
Certificate in Fabric Technology (Part time) from the Textile Training and Services Centre.	TAX3530		
Certificate in Textile Dyeing and Printing (Part time) from the Textile Training and Services Centre.	[TAX3370 and TAX4571] or TAX5551		
Diploma in Textile Technology from the Textile Training and Services Centre.	TAX3458 TAX3331 TAX3459 TAX3530 TAX3370	TAX4571 TAX4560	
Certificate in Textile Colouration and Finishing (Part time) and Diploma in Textile Colouration and Finishing (Part time) from the Textile Training and Services Centre.	TAX3458 {TAX3370 and TAX4571} or TAX5551		
Diploma in Clothing Technology, Clothing Industry Training Institute.	TAX3530 TAI3533 TAI3332 TAX3331	TAX4438 TAW4401 TAX4539	TAW5401
Certificate in Garment Production Management (Part time) from Clothing Industry Training Institute.	TAX3331		
College Diploma in Clothing Technology and Management (Fulltime), Brandix College of Clothing Technology.	TAX3530 TAX3331 TAI3332 TAI3533 TAM3234 TAM3535 MHZ3576	TAX4438 TAW4401 TAX4539 TAX4540 TAI4442	TAX5648
Diploma in Textile and Apparel Technology (Full time) , Sri Lanka Institute of Textile and Apparel (SLITA) -(Only for the Apparel Production and Management and Fashion Design & Product Development streams)	TAX3530 TAX3331 TAI3332 TAI3533 TAM3234 TAM3535 MHZ3576	TAX4539 TAX4540 TAX4438 TAI4442	TAX5648 TAX5551

Qualification	Courses exempted		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 & 6
Diploma in Textile and Apparel Technology (Full time after 2015), Sri Lanka Institute of Textile and Apparel (SLITA) - (Only for Apparel production and management stream and Fashion Design and Product Development stream)	TAX3530 TAI3332 MHZ3576	TAX4539 TAX4438	
Diploma in Textile and Apparel Technology (Full time), Sri Lanka Institute of Textile and Apparel (SLITA) - (Only for Textile manufacture stream	TAX3458 TAM3234 TAX3331 TAM3535 TAX3459 MHZ3576 TAX3370	TAX4539	TAX5648
Diploma in Textile and Apparel Technology (Full time after 2015), Sri Lanka Institute of Textile and Apparel (SLITA) - (Only for Textile manufacture stream	TAX3458 TAX3459 TAX3370 MHZ3576	TAX4539 TAX4571 TAX4560 TAX4361	
Diploma in Textile and Apparel Technology (Part time), Sri Lanka Institute of Textile and Apparel (SLITA).	TAX3530		TAX5551
Diploma in Lanka Institute of Fashion Technology (LIFT) – (Only for the Fashion Design and Product Development Stream)	TAI3270	TAI4474 TAI4373 TAI4371 TAI4472	TAI5375
NDT (Textile) (Old Curriculum-till 2007)	TAX3530 TAX3331 TAX3370 TAX3530 TAX3459 TAK3237 TAM3234 TAM3535	TAX4539 [Any two of TAX4571 TAW4401 TAX4560 TAW5403 TAW5404 TAW5405] TAW5406]	TAX5648 TAX5551
NDT (Textile) (Old Curriculum-till 2007) without completion of training	TAX3530 TAX3331 TAX3370 TAX3530 TAX3459 TAK3237 TAM3234 TAM3535	TAX4539 TAX4571 TAX4560	TAX5648 TAX5551
NDT (Clothing) (Old Curriculum-till 2007)	TAX3530 TAX3530 TAX3458 TAI3332 TAX3370 TAI3533 TAX3331 TAK3237 TAM3234 TAM3535	TAX4539 [Any two of TAX4571 TAW4401 TAX4540 TAW5401 TAI4442 TAW5403 TAX4438 TAW5404 TAW5405 TAW5406]	TAX5648 TAX5551
NDT (Clothing) (Old Curriculum-till 2007) without completion of training	TAX3530 TAX3530 TAX3370 TAI3332 TAX3331 TAX3331 TAX3458 TAI3533 TAK3237 TAM3234	TAM3535 TAX4539 TAX4540 TAX4438 TAI4442 TAX4571	TAX5648 TAX5551
*NDT (Textile and Clothing Technology) – From 2007 to 2021	TAX3458 TAX3530 TAX3459 TAI3332 TAX3370 TAX3331 TAK3237 TAI3533 TAM3234 TAM3535	TAX4539 [Any two of TAI4442 TAW4401 TAX4571 TAW5401 TAX4540 TAW5403 TAX4560 TAW5404 TAX4438 TAW5405 TAW5406]	TAX5648 TAX5551

Qualification	Courses exempted		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 & 6
*NDT (Textile and Clothing Technology) – From 2007 to 2021 Without completion of training	TAX3458 TAX3530 TAX3459 TAI3332 TAX3370 TAX3331 TAM3234 TAI3533 TAM3535 TAK3237	TAX4539 TAX4571 TAX4540 TAX4560 TAX4438 TAI4442	TAX5648 TAX5551
Diploma in Clothing Manufacture – CITI	TAX3530 TAX3331 TAI3533	TAX4438 TAX4539 TAW4401	TAW5401
BSc (Eng) Textile and Clothing, University of Moratuwa	TAM3234 TAX3530 TAM3535 TAI3533 TAX3458 TAX3459 TAX3370	TAX4539 TAX4571 TAX4560 TAI4442 AGM4307	CVM5401 DMM6601 TAX5648 [Any two of TAW4401 TAW5403 TAW5404 TAW5405 TAW5406]
Licentiateship of Textile Institute (LTI) Examination /Associateship of Textile Institutes (ATI) Technology Group Examination	See below for exemptions for individual papers		
Paper 1 in LTI /Paper 1 (e) in ATI – Textile Technology	TAX3530		
Paper 2 in LTI/Paper 2(a) in ATI – Fibre Technology and Textile Science	TAX3458		
Paper 3 in LTI /Paper 2 (b) in ATI – Yarn Technology and Yarn preparation	TAX3459		
Paper 4 in LTI /Paper 2 (c) in ATI- Fabric technology		TAX4560	TAX5648
Paper 5 in LTI /Paper 2 (d) in ATI- Dyeing and Finishing Technology	[TAX3370 and TAX4571] or TAX5551		
Paper 6 in LTI – Textile Testing		TAX4539	
Paper 9 in LTI- Quality Management in Textiles	MHZ3576		
Paper 2 in LTI – Garment Technology	TAX3331		
Certificate in Industrial Studies (OUSL)	See below for exemptions for individual papers		
TTI2631 Yarn manufacture	TAX3459		
TTI2632 Weaving		TAX4560	TAX5648
TTI2633 Textile Chemical processing	[TAX3370 and TAX4571] or TAX5551		
TTI3650 Pattern Making	TAI3533		
Diploma in Technology (Textile Engineering) from the OUSL	TAX3459 TAX3458 TAX3530	TAX4539 TAX4560	TAX5551

***Exemptions for NDT from 2022 are being reviewed, and will be available at the time of registration.

Qualifications in Agriculture and related disciplines

[Applicable for Honours Degree in Industrial Studies - Agriculture related disciplines]

Qualifications in Agricultural and related disciplines

Qualification	Courses exempted			
	Level 3		Level 4	Level 5
Diploma in Agriculture – Schools of Agriculture or Diploma in Agriculture – Aquinas College	AGI3450 AGI3552 AGM3354	AGM3203 TAK3237 AGI3553	AGI4460 AGX4356 AGW4401	AGW5401
NDT (Agriculture) or National Diploma in Agriculture (NDA) or Higher National Diploma in Agriculture (HNDA)- Department of Technical Education and Training	AGI3450 AGI3552 AGM3354	AGM3203 TAK3237 AGI3553	AGI4460 AGX4356 AGW4401	AGW5401
Diploma in Animal Husbandry, Sri Lanka, School of Animal Husbandry, Department of Animal Production and Health, Welisara			AGI4460	AGI5471
HNDT (Agriculture) – Sri Lanka Institute of Advanced Technological Education	AGI3450 AGI3552 AGM3354	AGM3203 TAK3237 AGI3553	AGI4460 AGX4356 AGW4401	AGW5401
NDT, HNDT, HNDA and NDA in Agriculture - without training	Exemptions granted for NDT, HNDT, HNDA and NDA (Agriculture) except AGW4401 & AGW5401			

There may be a revision in the Exemptions offered for Qualifications from next academic year, as a re-evaluation of external programmes is scheduled for this year.

Advanced Certificate in Apparel Technology Study Programme, Stand Alone Courses and Postgraduate Study Programmes

3.5 Advanced Certificate in Apparel Technology Study Programme

This programme is designed to provide an opportunity to those engaged in the relevant industry to gain an in-depth knowledge in the subject of specialisation. Obtaining six passes at G.C.E. (O/L) examination including Mathematics and the first language is required for admission to the Study Programme.

Duration

The minimum duration of the Advanced Certificate programme is one year, and the maximum duration is three years.

Medium of Instruction

The programme is offered in both Sinhala and English media.

Eligibility for Admission to the Programme of Study

A person seeking admission to the programme leading to the award of the Advanced Certificate in Apparel Technology shall be required to have,

- obtained six (06) passes including Mathematics and the first language in the General Certificate of Education (Ordinary Level) Examination, Sri Lanka or,

- secured an equivalent or higher qualification acceptable to the Senate.

Requirements for the award of the Advanced Certificate

The OUSL awards the Advanced Certificate in Apparel Technology to students who have acquired 30 credits by completing the courses listed in Table 9.

Those who possess appropriate qualifications may seek exemptions from relevant courses of the programme. However, they still require registering and successfully completing courses for minimum of 15 credits for the award of Advanced Certificate in Apparel Technology.

A list of qualifications for which exemptions could be claimed is given in Page 70.

Curriculum

The curriculum consists of compulsory courses given in Table 9 below.

Table 9 – Courses for Advanced Certificate in Apparel Technology

Course		Pre-requisites
Level 2		
TAX2585	Introducing Textiles	None
TAI2886	Apparel Technology	None
TAZ2587	Mathematics and Science for Textile Technology	None
TAI2488	Laboratory Practices and Industrial Exposure	None
TAI2289	Introducing Fashion	None
TAY2690	Advanced Certificate Project	None

For further information about the Advanced Certificate in Apparel Technology programme, please contact (0112881310).

Note:

The students of the Advanced Certificate in Apparel Technology programme, who wish to follow the Bachelor of Industrial Studies Honours degree programme in the subsequent year should apply online during the application issuing period and register for the degree programme during re-registration period.

Exemptions applicable for Advanced Certificate in Apparel Technology Study Programme

Qualification	Courses exempted
• G.C.E.(A/L) Sri Lanka – Combined mathematics or • G.C.E.(A/L) Sri Lanka – Pure mathematics and Applied mathematics or • G.C.E.(A/L) Sri Lanka – Physics	TAZ2587
Certificate in Fabric Technology (Part time) from the Textile Training and Services Centre.	TAX2585
Certificate in Garment Production Management (Part time) from Clothing Industry Training Institute.	TAI2886
Certificate in Garment Industry Management from Garment Industry Management Institute.	TAI2886
Licentiateship of Textile Institute (LTI) Examination /Associateship of Textile Institutes (ATI) Technology Group Examination - Paper 1 in LTI /Paper 1(e) in ATI (Textile Technology)	TAX2585
Licentiateship of Textile Institute (LTI) Examination - Paper 2 in LTI (Garment Technology)	TAI2886

3.6 Stand Alone Courses

Sometimes it may be required by someone to follow a few courses for the benefit of industrial career development or for personal development. You can register for these courses (maximum of 18 credits) without registering for a particular study programme.

Students should have the pre-requisites knowledge in respect of each of the course to register for the courses as Stand Alone.

If you later decide to enter a regular programme then you may seek exemptions from the courses you have passed as Stand Alone, subject to the fulfilment of relevant pre-requisites.

The tuition fee for each course is three times that of the corresponding course in the regular study programme.

Students registering for regular programmes cannot register for courses as Stand-Alone courses at the same time.

3.7 Postgraduate Study Programmes and Research Degrees

The Faculty is at present in the process of revising its postgraduate study programmes according to Sri Lanka Qualification Framework and meeting the current trends. Some of the postgraduate programmes that are on offer are:

- Master of Energy Management – One year programme
- Master of Science in Industrial Engineering – Two-year Programme
- Master of Science in Structural Engineering'-

Faculty also undertakes postgraduate research degrees leading to the awards of MPhil and PhD degrees. The interested applicants need to contact the Heads of Department relevant to the proposed study area.

Annex 1: Pathways to fulfil the Industrial Training requirements

	Exemption		Releasement	Undergo Training
	Complete	**Partial**		
Method	Learners may claim exemptions based on an acceptable qualification in the same specialization as listed in the Student Guidebook. Such exemptions are granted during registration after verifying the relevant certificates.	Learners may claim partial exemptions based on an acceptable qualification when entering a different specialisation, as listed in the Student Guidebook. Such exemptions are granted during registration after verifying the relevant certificates.	Learners with work experience in an area relevant to one's specialisation may apply for releasement by submitting a request to the Training Engineer. Learners who have undergone prior training are also eligible to apply.	The faculty assigns training placements based on the information given in the application form **FET/TRG/01.** Learners could state their preferred placements, and the details in the said application form. All such placements require the approval of NAITA.
Registration for Training Modules	Not required	Refer to Releasement and Undergo Training for training modules that are not exempted	Required. Prerequisite requirements to be satisfied.	Required. Prerequisite requirements to be satisfied.
Requirement for the Eligibility	None		Required to submit the completed application form **FET/TRG/01** to the Training Engineer after the add/drop period of the current academic year. The submission deadline shall be announced.	
Evaluation requirements	None		Learners are required to submit the completed application form **FET/TRG/07** along with documentary evidence of employment or prior internship, to the Training Engineer prior to the stipulated deadline for the current academic year. The qualified learners will then be requested to submit their Work Experience Report.	Learners are required to submit the completed application form **FET/TRG/02**, the **Daily Diary**, and the **Training Report** to the Training Engineer.
Final Assessment	None		Viva Voce Examination	Viva Voce Examination
Overall Assessment Criteria	Not applicable		0.5 x Mark for the Training Report + 0.5 x Viva Mark	0.1 x Mark for the Daily Diary + 0.4 x Mark for the Training Report + 0.5 x Viva Mark

For further information please refer the Industrial Training link of the Faculty of Engineering Technology web page at ou.ac.lk/fengtec All application forms and the Industrial Training Guideline (FET/TRG/00) can be downloaded from the given web link.

Annex 2: Application for Evaluation of Qualifications for Exemptions

Instructions: This application is for the evaluation of courses of study programs that are outside the university for granting exemptions from the courses of the study programs offered by the faculty of engineering technology.

- Before filling the applications, the applicant must carefully refer the latest version of the students' guidebook of the faculty (https://ou.ac.lk/fengtec/) and check whether the qualifications have been already evaluated. If the exemption of the qualifications is already given in the course exemption list of the guidebook, applying for the course exemption is NOT necessary
- The applicant also must read "Guidelines for the evaluation of programs /courses for granting exemptions" (https://ou.ac.lk/fengtec/) and familiarize the conditions and procedures laid down by the faculty for granting exemptions.
- Certified copies of all the documents required for the course evaluation should be submitted along with this application form. Insufficient evidence and information result the rejection of the application
- The receipt of payment for exemption evaluation also must be attached to the application form (Exemption evaluation fee (Rs. 300.00 per credit) can be paid to any regional /study center of the Open University of Sri Lanka)
- The results of the evaluation are uploaded to the faculty web page before commencing the new registration of the particular academic year.
- Duly filled application form together with all other relevant information should be reached to the following address on or before the date given in the faculty website (https://ou.ac.lk/fengtec/)

Part A: Applicant's personal Information

1. Full name of the applicant:
2. Name with initials (Mr./Mrs./Miss):
3. NIC Number:
4. Postal Address:
5. email address (if any):
6. Mobile No.:
7. Telephone No (Residential / Office):
8. Occupation:
9. Years of service after obtaining the qualification:
10. State whether you are newly registered student or an already registered student:

Part B: Program information

1. Indicate the programme and area of specialization from which the course exemptions are requested

Name of the program	Area of specialization	
Bachelor of Science Honours in Engineering	Agricultural & Plantation Engineering	
	Civil Engineering	
	Computer Engineering	
	Electrical Engineering	
	Electronic & Communication Engineering	
	Mechanical Engineering	
	Mechatronics Engineering	
	Textile & Clothing Engineering	
Bachelor of Industrial Studies Honours in Engineering	Agriculture	
	Apparel Production & Management	
	Fashion Design & Product Development	
	Textile Manufacture	
Bachelor of Software Engineering	Software Engineering	

2. State whether you have the entry qualifications of the program stated in 1 (YES/NO)
   (Note: If your entry qualification comes under "Obtained an equivalent or higher qualification acceptable to the Senate",) this application form shall not apply). For further information refer the "Eligibility to admission" section given in the students guide book

3. Provide the particulars of the Qualification(s) you have already gained and that are to be evaluated (If you possess more than one qualification to be evaluated, include additional copies of table 1):
Table 1

a) Title of the Course/Programme (Ex: Degree /Diploma/ Certificate/….)	
b) Title of the award (i.e. Qualification) (Ex: BSc)	
c) Name and address of awarded institute	
d) Designation, name and contact details of the official of the institute whom can be contacted (This should be at least head of the department of study)	
e) Entry requirements to follow the course/programme	
f) Duration of the Course/Programme	
g) Year of the award	
h) Nature of the program (Full time/ Part time)	
i) Institution or professional body that approved or accredited the program	
j) SLQF / NVQ level	

4. Details of the courses
Table 2

Course / subject tile	Year / semester /Level	Volume of learning (credits)	Lectures (hours)	Lab work (3 hour sessions)	Tutorial (hours)	Field visits (no days)	Training (no of weeks)

Table 3

Course / subject tile	Assignments (Numbers)	Mid term Tests (numbers)	Field visit reports	Course work / mini project	Design Project	Training

(All the information given in the tables 1 & 2 should be supported by official/certified copy of the document (program handbook/students' guidebook))

(All the information given in the table 3 should be supported by the copies of course components i.e. assignments, lab reports, etc.. for three years)

5. Match the course of the OUSL program from which seeks the exemptions with the course(s) of the program that has been completed and obtained the certificate

OUSL program		Program that has been already completed	
Course code	Course title	Course code	Course title

6. check list: Indicate whether the following documents are enclosed together with the application

Certified Copy of Degree certificate	
Copy of Transcript	
Student guidebook	
Program handbook	
Web link	
Document related to the Course evaluation forms	
Certification from the relevant institution	
Contact information of the institute concerned (tell / email)	
Lab detail sheets	
Project reports	
Assignments	
Final examination papers	

I herewith certify that all the information given above are true and correct.

Date   Signature of Applicant

Annex 3: Criteria for exemptions for English for General Academic Purposes (EGAP)

Students who wish to claim exemptions under the below mentioned standard criteria and under any other qualifications, should provide an exemption request letter along with the original certificate and a photocopy of the same and should hand them over at the time of registration.

Criteria for exemptions for English for General Academic Purposes (EGAP)- LTE3401

1. Successful completion of a bachelor's degree/Postgraduate Diploma/Master's Degree in English medium or
2. UTEL score of not less than band 6.00 in all 4 skills or
3. IELTS overall score of at least 5.0 (academic) or 5.5 (general) with not less than 4.00 in writing or
4. TOEFL
   - Paper based overall score of at least 450 with 3.5 in writing
   - Computer based overall score of at least 200 with 3.5 in writing
   - Overall score of at least 90 and writing score of 20 marks and above on the internet-based test or

5. Students who have completed their Advanced Level Examination in English medium or
6. Students who have completed London A/L (Edexcel or Cambridge) in English medium or
7. National College of Education-National Diploma in Teaching (English) conducted and awarded by the NIE or
8. Higher National Diploma in English (SLIATE) or
9. Diploma in English from a recognized university or
10. Diploma in Library and Information Science (in the English medium) conducted by the Sri Lanka Library Association or
11. English as a subject at the G.C.E. Advanced Level (Not General English) or
12. Diploma in English Language and Literature and Advanced Certificate in English conducted by Department of Language Studies or
13. National Diploma in Technology (NDT) – Institute of Technology University of Moratuwa or
14. Any other qualification acceptable to the Senate of the OUSL.

Note: In the case of IELTS and TOEFL the scores should be obtained not more than 3 years prior to the date of request for exemption.

Annex 4: Details of Scholarships

University Bursary

a) University Bursary is awarded by the OUSL to the value of 50% of the tuition fees of courses, for which the student registers during a particular academic year.
b) A student may be awarded a University Bursary in two academic years of different levels of the programme.

Eligibility Criteria for Award of the University Bursary

a) Student should be registered for a programme of study of a minimum duration of 2 years.
b) Student should have sat and attained a minimum GPA of 2.0 in the final examinations of courses adding up to a total of at least 18 credits at the particular level in the previous year.
c) No disciplinary action should have been taken against the student.
d) Gross family income of the student shall be less than Rs. 480, 000/=

University Enhancement Bursary

University Enhancement Bursary is awarded by the Open University of Sri Lanka to motivate the degree level students to complete the courses they have offered in a particular academic year and complete their degrees at a reasonably short period of time. The value of the scholarship varies based on the number of times the student is successful in meeting the bursary criteria. A student may be awarded a University Enhancement Bursary for a maximum of three times in his/her entire academic career at the OUSL. A student who has been awarded either a Mahapola Scholarship or the University Bursary is also entitled for the University Enhancement Bursary.

Eligibility Criteria for Award of University Enhancement Bursary

a) A student to become eligible for the award of the University Enhancement Bursary s/he should register for a minimum of 27 credits of courses in the first year of registration at the OUSL and successfully complete all the credits s/he registered in the same academic year. However, if a student chooses to register for credits more than 27 credits, s/he shall be required to complete the additional credits s/he has registered to become eligible for the bursary.

b) In the subsequent year/s the student shall be required to register for a minimum of 27 credits of courses at the OUSL and successfully complete all the credits s/he registered for in the same academic year. However, if a student chooses to register for credits more than 27 credits, s/he shall be required to complete the additional credits s/he has registered for to become eligible for the bursary.

c) A student who fulfils the requirements given in (a) or (b) for the first time will be eligible for an award of a bursary equivalent to 10% of the tuition fee in the next academic year.

d) Similarly a student who fulfils the requirements given in (a) or (b) for the second time will be eligible for an award of a bursary equivalent to 20% of the tuition fee in the next academic year.

e) A student who fulfils the requirements given in (a) or (b) for the third time will be eligible for an award of a bursary equivalent to 30% of the tuition fee in the next academic year.

f) The bursary amounts awarded to the students as per (c), (d) and (e) above, would be set aside from the tuition fee for the next academic year.

Mahapola Scholarships

a) Mahapola scholarships are awarded by Mahapola Higher Education Scholarship Trust Fund

b) Value of Rs. 8000/= each towards the payment of tuition fees of courses

c) Scholarship payments will be made in two instalments

d) The second instalment will be paid only if the conduct and academic performance of the student are satisfactory.

Eligibility Criteria for Award of the Mahapola Scholarship

a) Students should have registered for courses at level 4 or above.

b) Student should not be employed

c) Student should not have exceeded the age of 30 yrs on the date of selection.

d) Student should have sat and attained a minimum grade point average (GPA) of 2.0 in the final examination of courses adding up to a total of at least 18 credits in the particular level in the previous academic year.

e) Parental income ceiling should be equal or less than Rs. 300,000/= with the relevant concessions per annum added to the income ceiling as specified by the UGC.

f) Students will be required to provide a letter from the Gramasevaka to certify the annual parental income.

g) No disciplinary action should have been taken against the student.

Dean's List

The undergraduate study programmes offered by the faculty are considered for the Dean's List Awards.

Eligibility Criteria for the Dean's List Award

A student registered in an undergraduate programme offered by the Faculty of Engineering Technology will qualify to be placed on the Dean's List of the relevant academic year, provided that the following criteria are fulfilled.

a. Completed a minimum of 30 credits in an academic year with a *Grade Point Average of 3.70 or better, in the first instance of obtaining eligibility to sit the final examinations, and,

b. Obtained C grades or above for any credits completed at the final examinations of the relevant academic year (including credits completed over and above the minimum 30 credits considered), and,

c. No repeats (F grades) or Re-sits are permitted among the total registered courses in the relevant academic year, however RX grades are permitted, and,

d. No disciplinary action should have been taken against the student.

*Grade Point Average will be the weighted mean of the Grade Point Values a student earns by completing the final examinations in the relevant academic year (including credits completed over and above the minimum 30 credits considered).

Special benefits to the students

- The Dean's List placement will be noted on the Student's Transcript.
- Each student placed on the Dean's List will receive a Letter of Commendation from the Dean of the Faculty of Engineering Technology.
- A scholarship to the value of 24 credits of courses (tuition fees as relevant to the programme) will be awarded to the top five (05) students placed on the Dean's List of each programme.

Criteria for the Awarding Scholarships for the Dean's List Awardees

- In selecting 24 course credits for the scholarship, the credits should be selected sequentially from higher to lower-level courses.
- In situations where more than five (05) students are eligible for the top five (05) places, all such students shall be awarded the scholarship.
- A student, who has already been awarded any other scholarship or bursary by the OUSL for the relevant academic year, shall not be considered for this scholarship.
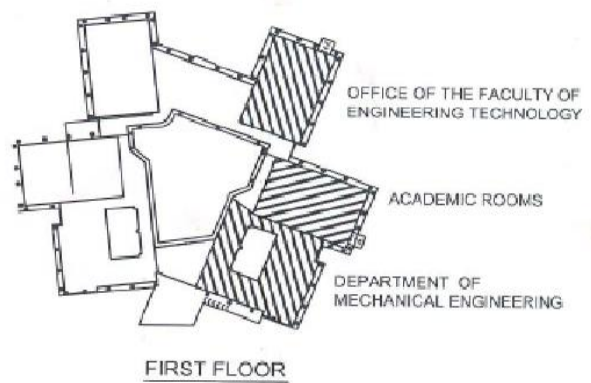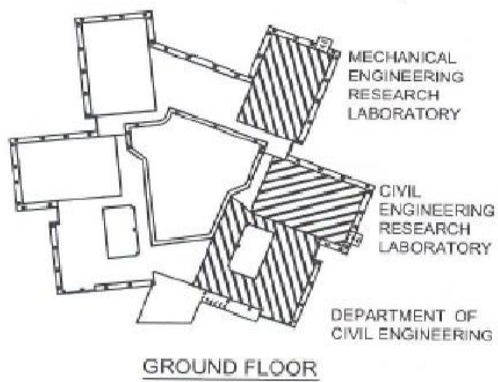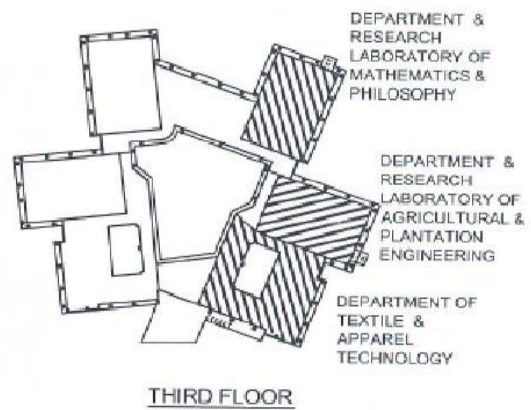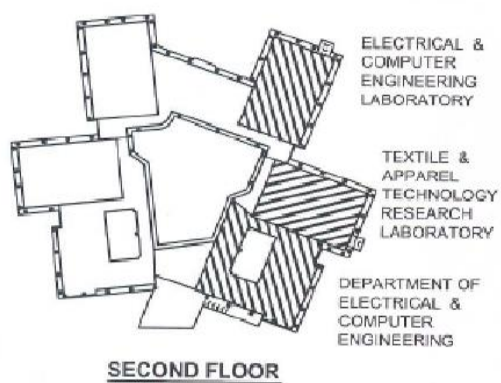
The Dean's List of the relevant academic year will be computed for each undergraduate programme of the faculty after all final examination results of the relevant academic year are released. The Faculty Board will be responsible for approval of Dean's List Awards.

If and when necessary, the criteria may be amended with the approval of the Faculty Board.

Annex 5: Layout of the Central Campus, Nawala

THE OPEN UNIVERSITY OF SRI LANKA
COLOMBO REGIONAL CENTRE MAP

01 - COLOMBO REGIONAL CENTRE OFFICE
02 - DISPATCH
02a - STORES   /   02b - CRC CLASS ROOM
03 - BLOCK 01 TO 20
04 - PRESS
05 - EDUCATION FACULTY BUILDING
06 - PRE - SCHOOL BUILDING
07 - HEALTH CENTRE   / 07a - DAY CARE CENTRE
08 - AUTO MOBILE LAB
09 - SHRINE ROOM
10 - SCIENCE AND TECHNOLOGY BUILDING

11 - EXAM HALL NO. 03
11a - EXAM HALL NO. 02
11b - EXAM HALL NO. 01
11c - EXAM HALL NO. 01a
11d - EXAM HALL NO. 01b
12 - MEDIA HOUSE
13 - LIBRARY
14 - FACULTY OF HUMANITIES AND
      SOCIAL SCIENCES BUILDING

15 - SENATE HOUSE
15a - IT BUILDING
16 - ADMINISTRATION BUILDING
17 - TEMPORARY RESIDENTIAL FACILITY - OLD
18 - STAFF DEVELOPMENT CENTRE
19 - LANDS AND BUILDING DEPARTMENT
20 - GUEST HOUSE
21 - CANTEEN - CENTRAL CAMPUS
22 - POST GRADUATE INSTITUTE
      OF ENGLISH BUILDING
23 - EXAM HALL NO. 05
24 - TEMPORARY RESIDENTIAL FACILITY - NEW
25 - EXAM HALL NO. 04

SECOND FLOOR

- ELECTRICAL & COMPUTER ENGINEERING LABORATORY
- TEXTILE & APPAREL TECHNOLOGY RESEARCH LABORATORY
- DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

THIRD FLOOR

- DEPARTMENT & RESEARCH LABORATORY OF MATHEMATICS & PHILOSOPHY
- DEPARTMENT & RESEARCH LABORATORY OF AGRICULTURAL & PLANTATION ENGINEERING
- DEPARTMENT OF TEXTILE & APPAREL TECHNOLOGY

GROUND FLOOR

- MECHANICAL ENGINEERING RESEARCH LABORATORY
- CIVIL ENGINEERING RESEARCH LABORATORY
- DEPARTMENT OF CIVIL ENGINEERING

FIRST FLOOR

- OFFICE OF THE FACULTY OF ENGINEERING TECHNOLOGY
- ACADEMIC ROOMS
- DEPARTMENT OF MECHANICAL ENGINEERING

Allocation of Academic Departments in New Science and Technology Building

Prepared by the Faculty Registration Committee – 2023/2024

Snr. Prof. T. M. Pallewatta (Chairman)	- Head of the Department of Civil Engineering
Mr. P. K. J. de Mel	- Department of Agricultural & Plantation Engineering
Mr. D. I. Fernando	- Department of Civil Engineering
Mr. K. A. R. D. Gunaratne	- Department of Electrical & Computer Engineering
Dr. W. A. L. Niwanthi	- Department of Mathematics & Philosophy of Engineering
Mr. R. L. K. Lokuliyana	- Department of Mechanical Engineering
Mrs. T. P. G. N. T. Alwis	- Department of Textile & Apparel Technology
Mr. Wijikumar Kularasasingam	- Assistant Registrar /Faculty of Engineering Technology

Disclaimer : The Information in this document is based on the Status as of September 2023. Some changes may occur under Faculty Board approval.