



# **The Open University of Sri Lanka**

## **Faculty of Engineering Technology**

### **Student Guidebook**

### **2019 / 2020**

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## Time schedule for student registration

Type of Registration	Centres	Dates
New-Registration	Colombo Regional Centre	17, 18 and 20 April 2019, 22 – 26 April 2019 ( 8 days)
	All Regional Centres (except Colombo) and All Study Centres (except Kuliyaipitiya)	17, 18 and 20 April 2019, 23 – 25 April 2019 ( 6 days)
Re-Registration (only present students)	Colombo Regional Centre	14 – 17 May 2019, 20 and 21 May 2019, 23 – 25 May 2019 ( 9 days)
	All Regional Centres (except Colombo)	14 – 17 May 2019, 21 May 2019, 23 – 25 May 2019 ( 8 days)
Late Registration for New Students	Colombo Regional Centre	29 April 2019
	Other Regional Centres	26 April 2019
Late Registration for Re-Registration	Colombo Regional Centre	27 – 29 May 2019 ( 3 days)
	Other Regional Centres	28 and 29 May 2019
Add / Drop Courses	All Regional Centres	27 – 29 June 2019
Drop Courses only	All Regional Centres	Until 27 July 2019

### On-line submission of application forms

Applicants should submit applications on-line by visiting the university website (**[www.ou.ac.lk/home](http://www.ou.ac.lk/home)**). Relevant payment could be made online through Debit/Credit cards or eZ cash and at Centres.

### Revisions in Curricula

The Faculty of Engineering Technology has revised the curricula of all its study programs to comply the Sri Lanka Qualification Framework (SLQF) with extensive updates to the course syllabuses. The Revised Curricula are implemented from the academic year 2019/20 by introducing levels 3 and 4 courses. The levels 5 and above courses are introduced from the academic year 2020/21.

## Message from the Dean

This Guidebook helps you select the right study programme conducted by the Faculty of Engineering Technology of the OUSL paving the way for a bright professional life in the fields of Engineering and Technology. The Faculty of Engineering Technology, which comes under the University Grants Commission, has over 30 years of experience in delivering a wide range of quality distance learning study programmes in a variety of disciplines in engineering and technology. At present the Faculty consists of six Academic Departments, with over sixty well qualified dedicated academic staff members. The Faculty offers a wide spectrum of qualifications which includes Certificates, Advanced Certificates, Diplomas, Higher Diplomas, Undergraduate and Postgraduate Degrees in various disciplines which fulfil the requirements of a vast number of students. Being a faculty of a distance learning institution, the study programmes of the Faculty have been designed in such a way that the student can follow them with a minimum number of face to face teaching sessions. The Faculty provides required learner support with the help of open educational technology.



Since the programmes are offered in distance mode, the students have the freedom to work while studying in the University. Although each study programme has a minimum duration, students have the option to extend the duration up to three times of the minimum duration depending upon their time availability for studies. Faculty also recognises prior qualifications of the applicants and they can enter a programme at different levels. The University has taken steps to cater to the demands of the provinces of the country through the network of Regional and Study Centres, and the students can carry out many of the academic activities without visiting the Central Campus at Nawala.

At present the Faculty offers three undergraduate study programmes, namely Bachelor of Technology Honours in Engineering [BTechHons(Eng)], Bachelor of Industrial Studies Honours [BISHons], and Bachelor of Software Engineering Honours [BSEHons]. The students following study programmes leading to BTechHons(Eng), BISHons or BSEHons may also obtain a Higher Diploma in the relevant discipline after fulfilling the requirements. The graduates of the Faculty are working very successfully in relevant industries both locally and abroad while some are pursuing postgraduate studies locally as well as abroad. The study programmes are regularly updated in keeping with current trends, and the latest revisions to the curricula have been made to meet the professional accreditation requirements while fully complying with the Sri Lanka Qualification Framework.

Hope you too will find our study programmes and courses interesting, motivating and useful, and your learning experience rewarding and enjoyable. On behalf of the Faculty I wish you good luck in all your future endeavours.

Prof. Ajith Dolage  
Dean/ Faculty of Engineering Technology

*“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.”*

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# 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 university in Sri Lanka where students may pursue further education by distance education techniques in keeping with the philosophy of Open and Distance Learning. With the OUSL Ordinance No. 1 of 1990, 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 universities under the purview of the University Grants Commission (UGC) of Sri Lanka. The OUSL offers its own programmes of study leading to Certificates, Diplomas, Higher Diplomas, Honours Degrees and Postgraduate Diplomas and Masters Degrees. In addition to these main academic programmes, Stand Alone courses are offered. 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 five academic faculties of the OUSL. The other four faculties are the Faculty of Natural Sciences, the Faculty of Humanities and Social Sciences, the Faculty of Education and the Faculty of Health Sciences.

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

1. Agricultural and Plantation Engineering
2. Civil Engineering
3. Electrical and Computer Engineering
4. Mathematics and Philosophy of Engineering
5. Mechanical Engineering
6. 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 meeting the professional accreditation requirement.



## 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 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 technology and are compulsory. Pre-scheduled Day-Schools are conducted by the academics for groups of students at Regional and Study Centres of the University. 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) or equivalent qualifications may join the Honours Degree programmes directly. Others will be required to first follow the foundation programmes offered by the University.

### **Activity Schedule**

All students are given an Activity Diary when they register for a study programme. 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, the contact information of course academic coordinators as well as details of continuous assessments are included in the Activity Diary. While the University is making every effort to schedule as many activities as possible during weekends and public holidays, certain activities such as laboratory classes and examinations may have to be scheduled during weekdays. Since the "Activity Diary" for the whole year is given to the students at the beginning of the academic year, it is hoped that they can plan their work 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. 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 (usually one month after the last date of registration), 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, the first instalment of 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, mini projects (MP) and continuous assessment tests (CATs) 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 pass that course. 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 number of courses which s/he can cope within the time available.

A student gaining more than 40% OCAM in a particular course is expected to sit the final examination in the same year by application. However, facing the final examination may be postponed to following year if necessary, within the valid period of 2 academic years including the year the student passed CA.

Therefore, students 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 mark for a course but fails to obtain the minimum pass mark at the final examination will be considered as a re-sit student. Re-sit students are not required to re-register for that particular course, but should sit and pass the Final examination in the next academic year. Re-sit students can obtain only a C grade for the particular course.

## **1.4 Student Academic Counselling**

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

For this purpose the Faculty has a well organized procedure. Students can discuss their problems, 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 all the time 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 indiscipline 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 the issues faced by the 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 Faculty Board.

## 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 with a particular specialisation, a specific course combination stipulated for that specialisation needs to be fulfilled.

#### Courses

The fundamental entity in the dissemination process of knowledge is known as a “course” In other words, a course is equivalent to 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	L or E
Management	M

#### Course Levels

Each course is also assigned a "SLQF Level", between one (1) and seven (9). 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 and 9.

#### 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. The credit rating of a course is denoted by the second digit (fifth character) in the Course Code.

*Example: The course MHZ3551 has a credit rating of 5, which means the student is expected to spend about 250 notional hours of learning during the academic year.*

#### Course Codes

Each course is assigned with a code consisting of letters and numbers. The course code denotes 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 the 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
Language Studies	LE
Legal Studies	LL

Example: Course code MHZ3551

MH - Mathematics and Philosophy of Engineering  
Z – Mathematics Course Category  
3 – SLQF level

5 – Credit Rating

51 – Serial Number assigned by the Department

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, Higher Diploma 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 and relevant industrial training required for an award in that field of study should also be satisfied.

## 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 Examination, X should be greater than or equal to 40%.

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

$$Z = Y, \text{ if } Y < 40$$

Each student who sits for the Final Examination of a course will be awarded a grade and a Grade Point Value, as given in 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 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.

The students who achieve a Cumulative GPA above a certain value and satisfy other conditions as determined by the Faculty are included in the Dean's List in every 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 Technology Honours in Engineering programme.
- Thurairajah Gold Medal for the best final year project in Bachelor of Technology Honours in engineering programme
- ERU Gold Medal for the best research paper submitted for publication based on final year research project in Bachelor of Technology Honours in Engineering programme.
- Mrs. S.M. Abeygunesekera de Silva gold medal for the best student in Mechatronics Engineering specialisation of Bachelor of Technology Honours in Engineering Programme.
- Liyanaguruge Assie Annette de Silva gold medal for the Best Student in Bachelor of Industrial Studies Honours (Agriculture) programme.

- Virtusa Academic Excellence Award for the student with highest GPA in Bachelor of Software Engineering Honours programme.
- Gold Medal for the Best Civil Engineering Final Year Project in Bachelor of Technology Honours in Engineering Programme
- Gold Medal for the Best Civil Engineering student in Bachelor of Technology Honours in Engineering Programme

## 2.5 Exemptions

Students who have academic qualifications other than entry requirements may be granted exemptions according to their qualifications. Such qualifications 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 downloadable from the faculty webpage and sent it on or before the specified date. The application form is also included in the **Annex 1**. 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 much necessary that the students become familiar with self learning. Also the students should have a proficiency in English language, as all study programmes (except some 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. This

programme is conducted twice within an academic year. You are strongly advised to follow this programme as some of the courses will be prerequisites for the courses in the main degree programme.

**NOTE:** Activities of the compulsory courses are scheduled without clashing with levels 3 and 4 compulsory courses of the main study programme. Activities of the optional courses may be scheduled at the same time-slots with regular courses. So you must check the activity diary for any clashes if you wish to offer any optional courses.

### Programme Content

Course Code	Course Title
<b>Compulsory Courses</b>	
LEE3410	English for General Academic Purposes [EGAP]
FDE3020	Empowering for Independent Learning [EfiL]
<b>Optional Courses</b>	
LEE3111	Second National Language (Sinhala)
LEE3112	Second National Language (Tamil)
FXE3114	Soft Skills for Personal Development
CSE3213	ICT Skills
DSE3215	Social Harmony

### Fees for StART@OUSL

For LEE3410, the fee is Rs 4,800/= and there is no fee for FDE3020. The students should pay the total course fee along with the 1<sup>st</sup> instalment.

## 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 – Pass 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], LEE3410 [CR] or VTL2001
4	FDE3020 [CA], LEE3410 [CA] or VTL2001
5, 6 and 7	FDE3020 [P], LEE3410 [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 LEE3410. Therefore, it is mandatory that every student offers LEE3410.

### Minimum and Maximum Number of Credits

When a student enrolls a study programme s/he has to register for a minimum of 8 credits. In subsequent years, this minimum limit does not apply, but s/he 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 the OUSL was set up primarily to cater to the needs of employed students. As these students would naturally be earning at least a modest income, it was felt that the decision to levy fees is justified.

However, there is no intention of recovering the full cost of education from the students. 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 2019/20 are as follows:

Type of Fee	Certificate, Diploma and Degree Programmes	Postgraduate Programmes
Registration	400	1000
Facilities	1500	1500
Library Facility	100	200
Exemption	60 per credit	
Tuition fee	Depends on the Course Level	

Tuition fee applicable for the academic year 2019/20 are given in the table below. These are liable to be revised for subsequent academic years.

Course SLQF Level	Tuition fee Rs per credit
3 and 4	1150
5 and 6	1750

Tuition fee applicable for the Diploma in Information Systems and Technology study programme is Rs. 2,300/= per credit.

Tuition fee applicable for the Bachelor of Software Engineering Honours Degree Programme is Rs. 2,700 per credit.

The 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

An initial payment, as specified on the initial voucher should be paid by the applicant at the time of registration, and the balance is to be settled at the payment of second instalment about half way into the academic year.

### Scholarships

The University has a limited number of bursaries, including University Bursaries and Mahapola Scholarships to help students who are in need of financial support. For details See **Annex 2.**

## Section 3: Study Programme Details

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

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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)

# **Bachelor of Technology Honours in Engineering Degree 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 systems composed with outstanding and up-to-date academic content delivered within a well planned curriculum framework and course syllabuses 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 and research & scholarship.

### 3.1 Bachelor of Technology Honours in Engineering Degree Study Programme

The Bachelor of Technology 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 that it meets the academic requirements of major Engineering Institutions, both in Sri Lanka and overseas (e.g. The Institution of Engineers, Sri Lanka).

The Faculty expects a student who is awarded the Bachelor of Technology 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 to 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

#### Duration

The minimum duration of the Honours Degree programme starting from level 3 is 4 academic

years and the maximum number of academic years a student can spend to complete the degree programme is twelve (12).

#### Medium of instruction

The medium of instruction of the study programme is English.

#### Areas of Specialisation

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

#### Eligibility for Admission to the Programme of Study

A person seeking admission to the programme leading to the award of the Degree of Bachelor of Technology Honours in Engineering shall be required to have:

- Obtained passes in the subjects, Combined Mathematics, Physics and Chemistry at the General Certificate of Education (Advanced Level) Examination, Sri Lanka, in one sitting or
- Completed foundation courses equivalent to the subjects listed in above 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 Technology Honours in Engineering, S/he has to meet the following requirements (within a maximum period of 15 academic 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 Table 1



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

Category	Minimum SLQF credits	Maximum SLQF credits
Engineering (X)	90 Subject to a minimum of 40 at Level 5 or above, of which at least 5 at Level 7	95 Subject to a minimum of 40 at Level 5 or above, of which at least 5 at Level 7
Engineering projects (Y)	9 of which at least 8 at Level 7	14 of which at least 8 at Level 7
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 7	

### 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 specialization, and
- (2) Fulfil the level-wise and category-wise minimum course credits as given in Table 2 with minimum total of 74 credits

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

Category	Minimum SLQF credits	Maximum SLQF 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
- (3) Compulsory courses at level 4

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.

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

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

### 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 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 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 Higher Diploma:

Minimum credit requirements a student shall acquire by successful completion 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 in Page 37.

*Note: 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 Technology 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, and named as the Revised Curriculum. The students who have enrolled the study programme up to the academic year 2017/18 are following the previous curriculum and named as Interim Curriculum.

This Section gives the combination of courses for the specialisations of the Bachelor of Technology Honours in Engineering Degree.

From the academic year 2019/20, only levels 3 and 4 courses are available from the Revised Curriculum and levels 5, 6 and 7 courses will be available from the academic year 2020/21. The students enter the programme with prior qualifications (lateral entry) having obtained exemptions from the lower level courses may have to register for equivalent courses of the Interim Curriculum in 2019/20. Such equivalent courses have been listed alongside the courses of the Revised Curriculum where applicable.

**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 specializations, in order to meet Z and J Category Course Credit requirements.

<b>Courses (Revised Curriculum)</b>		<b>Pre-requisites</b>
MHZ3551	Engineering Mathematics I	None
MHZ3552	Engineering Mathematics II	None
LLJ3245	Introduction to Laws of Sri Lanka	None
MHZ4256	Mathematics for Computing	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

\*These courses are not available in the academic year 2019/20. Instead, the student can offer Alternative Courses given below

<b>Courses (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>
MHZ5554	Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
MHZ5355	Discrete Mathematics	MHZ5340 Discrete Mathematics II
MHJ5342	Technology, Society and Environment	MHJ5533 Technology, Society and Environment
MHJ5343	Nature of Science	MHJ5531 Nature of Science

Unless otherwise stated, Levels 5, 6 and 7 courses of the Revised Curriculum will not be available in the academic year 2019/20. Instead, the student can offer **alternative courses** mentioned under the curriculum of each specialization. Once the student successfully completes the alternative course, such courses are converted to the courses of the Revised Curriculum according to the Course Conversions given in **Annex 3**.

## Curriculum for Civil Engineering Specialization

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)	Prerequisites
<b>Level 3</b>	
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
<b>Level 4</b>	
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), DMW3001 (P)
MHZ4553 Engineering Mathematics III	MHZ3551(CA), MHZ3552(CA)
AGM4307 Economics and Marketing for Engineers	Pass in 18 credits in Level 3

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)	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 26 credits at level 4 or above

\*compulsory for Higher Diploma    \*\*not offered in 2019/20

**Levels 5, 6 and 7 Compulsory Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
CVX5440 Surveying II	CVX4342 (P) & Pass in additional 15 credits in X Category, Subject to a minimum of 5 at Level 4 or above.
CVX5241 Hydraulic Engineering II	CVX4240 (P), CVX4241 (P)
CVX5242 Mechanics of Fluids	CVX4240 (P), CVX4241 (P)
CVX5443 Structural Analysis	CVX4345 (P), MHZ4553 (P)
MHZ5554 Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401 Accounting for Engineers	AGM4307 (P)
CVX6444 Geotechnics	CVX4343 (P)
CVX6345 Environmental Engineering	CVX3340 (P), CVX4240 (P), CVX4241 (P)
CVX6546 Construction Engineering and Management	CVX4446 (P) and CVX4445 (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
CVX7640 Structural Design	CVX5443 (P), CVX4445 (P)
CVX7241 Geotechnical Design	CVX6444 (P)
CVX7242 Environmental Engineering Design	CVX6345(CR)
CVY7880 Engineering Research Project (Civil)	Pass in 80 credits including: 50 credits Pass in X category courses, CVX4545(P), CVX6180(P)
CVY7385 Comprehensive Design Project (Civil)	Pass in 80 credits including: 50 credits Pass in X category courses, CVX4545(P), CVX6180(P)

**Levels 5, 6 and 7 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
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)

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
CVX7349 Environmental Modelling and Management	CVX5242 (CA) CVX6345 (CA), CVX7242 (CR)
CVX7350 Remote Sensing and GIS	None

**Alternative Courses for the academic year 2019/20**

<b>Course (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
CVX5440 Surveying II	CVX5530 Surveying II
CVX5241 Hydraulic Engineering II	CVX5531 Mechanics of Fluids
CVX5242 Mechanics of Fluids	CVX5531 Mechanics of Fluids
CVX5443 Structural Analysis	CVX5533 Structural Analysis
MHZ5554 Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
CVX6444 Geotechnics	CVX6530 Geotechnics
CVX6345 Environmental Engineering	CVX6533 Environmental Engineering
CVX6546 Construction Engineering and Management	CVX6831 Construction Engineering & management
CVX6180 Research Methodology and Project Identification (Civil Engineering)	CVY6397 Project Identification & literature Survey
DMM6601 Management for Engineers	DMM5836 Management for Engineers
CVW6803 Industrial Training (Civil - Undergraduate)	CVW5003 Industrial Training (Civil - Undergraduate)
CVX7640 Structural Design	CVX6832 Structural Design
CVX7241 Geotechnical Design	CVX6530 Geotechnics
CVX7242 Environmental Engineering Design	None None
CVY7880 Engineering Research Project (Civil)	CVY6D95 Individual Project – Type B (Civil) CVY6A96 Group Project (Civil) CVY6A98 Individual Project – Type A (Civil)
CVY7385 Comprehensive Design Project (Civil)	None None

## Curriculum for Computer Engineering Specialization

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)	Prerequisites
<b>Level 3</b>	
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
<b>Level 4</b>	
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	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 in Level 3

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)	Prerequisites
EEX3266 Information Systems and Data Management	None
EEX3269 Mobile Application Development for Android	None
EEX3262 Introduction to Object Oriented Programming	EEX3417(CR)
EEL3372 Programming in Python	None

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
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)

### Levels 5, 6 and 7 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
EEX5434 Data Communications & Networking	EEX3410(P), EEX3336(P), MHZ3551(P), MHZ3552(CR), AGM3203(P)
EEX5335 Operating Systems	EEX4435(CA), EEX4336(CA), EEX5536(CR), MHZ5355(CA), 36 credits pass from level 3
EEX5536 Computer Architecture	[EEX3417(P), EEX3336(P), EEX3351(P), MHZ4553 (P), EEX4436(CA) ], 30 credits pass from level 3 or above
EEX5346 Embedded Systems	[EEX3417(P), EEX3336(P), EEX3351(P), EEX4436(CA), EEX4351(CA), [EEX5335(CR) or EEX5563(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 from level 3
MHZ5554 Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
MHZ5355 Discrete Mathematics	MHZ3551(P)
CVM5401 Accounting for Engineers	AGM4307(P)
EEW5501 Industrial Training (Computer)	65 credits pass in levels 3 or above, EEX4347(P), EEW4301(CR)
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 credit pass from level 3 or above
EEX6181 Research Methodology and Project Identification (Computer Engineering)	Pass in 60 credits
DMM6601 Management for Engineers	AGM4307(P), CVM5401(CA)
EEX7436 Processor Design	EEX5351 (CA), [EEX5563(CA) or EEX5536(CA)], EEX3417(P), AGM3203(P), MHZ3551(P), EEX3336(P), EEX4436(P)
EEX7337 System Design in Groups	EEX4435(P), EEX4347(P), EEX4436(P), EEX5270(CA), MHZ5554(P) and pass in 60 credits in level 3 or above
EEM6201 Professional Practice	Pass in 36 credits in level 3 and Pass in 24 credits at level 4 or above
EEY7881 Engineering Research Project (Computer Engineering)	Pass in 80 credits including 50 credits Pass in X category courses



**Levels 5, 6 and 7 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
EEX5280 Creative Design	45 credits pass in level 3 or above
EEX5466 Advanced Database Systems	EEX3266(P), EEX4366(CA)
EEX5467 Software Testing and Quality Assurance	EEX4347(P), 20 credits pass in level 3
EEX7240 Neural Networks & Fuzzy Logic Applications	65 credits pass and EEX3417(P)
EEX7244 Data Mining	EEX4435 (P), MHZ4553 (P), 60 credit passes in level 3 or above.
EEX7340 AI Techniques & Agent Technology	EEX4435(P), EEX4347(P), MHZ5355(P)
EEX7171 Emerging Technologies	60 credits pass from level 3 or above

**Alternative Courses for the academic year 2019/20**

<b>Course (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
EEX5434 Data Communications & Networking	EEX5534 Data Communications
EEX5335 Operating Systems	EEX5535 Operating systems
EEX5536 Computer Architecture	EEX5536 Computer Architecture
EEX5346 Embedded Systems	None
EEX5351 Digital Electronic Systems	EEX6351 Digital Electronic systems
EEX5360 Signals and Systems	None
EEX5270 Information Security	None
MHZ5554 Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
MHZ5355 Discrete Mathematics	MHZ5340 Discrete Mathematics II
CVM5401 Accounting for Engineers	None
EEW5501 Industrial Training (Computer)	EEW5001 Industrial Training II (Software-undergraduate)
EEX6335 Compiler Design	EEX6535 Compiler Design
EEX6236 Advanced Computer Architecture	None
EEX6181 Research Methodology and Project Identification (Computer Engineering)	None
DMM6601 Management for Engineers	DMM5836 Management for Engineers
EEX7436 Processor Design	EEX6536 Processor design
EEX7337 System Design in Groups	None
EEM6201 Professional Practice	None
EEY7881 Engineering Research Project (Computer Engineering)	EEY6D95 Individual project – Type B (Computer, Electrical, Electronic and Communication)

## Curriculum for Electrical Engineering Specialisation

### Levels 3 and 4 Compulsory Courses

Course (Revised Curriculum)		Prerequisites
<b>Level 3</b>		
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
<b>Level 4</b>		
EEX4331	Circuit theory and design	EEX3410 (CA), MHZ3551 (CA), MHZ3552 (CA)
EEX4542	Power systems I	EEX3410(P), MHZ3551(P), MHZ3552(CA), 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
EEW4301	Industrial training I (Electronics)	[Pass in 36 credits at level 3], EEX4351(CR)
EEW4502	Industrial training II (Electrical power)	[Pass in 45 credits at level 3 or above], EEX4542(CA), EEX4448(CA)], EEW4301(CR)

### Levels 3 and 4 Elective courses

Course (Revised Curriculum)		Prerequisites
EEX3262	Introduction to object oriented programming	EEX3417(CR)
EEX3266	Information systems and data management	None
EEX3269	Mobile application development for android	None

**Levels 5, 6 and 7 Compulsory Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Course (Revised Curriculum)</b>		<b>Prerequisites</b>
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) , Pass in 75 Credits at level 3 and 4
MHZ5554	Engineering mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for engineers	AGM4307(P)
EEX6354	Comprehensive electrical engineering design	EEX4542 (CA), EEX5453 (CR), 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	AGM4307(P), CVM5401(CA)
EEW6502	Industrial training II (Electrical power - undergraduate)	EEX4542(CA), EEX4448(CA), EEW4301(CR), EEX5352(CA) ,Pass in 60 credits at level 3 or above,
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), Pass in 60 credits at level 3 and 4, EEX4542(P)
EEY7882	Engineering research project [Electrical]	Pass in 80 credits including 50 credits Pass in X category courses

**Levels 5, 6 and 7 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Course</b>	<b>Pre-requisites</b>
EEX5434 Data communications and networking	EEX3410(P), EEX3336(P), MHZ3551(P), MHZ3552(CR), AGM3203(P)
EEX5346 Embedded systems	[EEX3417(P), EEX3336(P), EEX3351(P), EEX4436(CA), EEX4351(CA), [EEX5335(CR) or EEX5563(CR)], MHJ5342(CR)]

Course		Pre-requisites
EEX5360	Signals and systems	EEX3336(P), MHZ4553(CR), MHZ3551(P), MHZ3552(P)
EEX5280	Creative design	Pass in 45 credits at level 3 or above
EEX5563	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 level 3 and 4
EEX6253	Physical and optoelectronics	MHZ4553(P), EEX4351(P), Pass in 50 credits at level 3 and 4
TAX6556	Ergonomics	Pass in 45 credits at level 4 or above
EEX7353	Power electronic applications and drives	EEX5453(CA), EEX6354(P), EEX5352(CA), MHZ4553(P), Pass in 60 credits at level 3 and 4
EEX7342	Advanced control engineering	DMX5403(P), MHZ5554(P), Pass in 80 credits in Level 3 or above
EEX7241	Neural networks & fuzzy logic applications	65 credits pass, EEX3417(P)
EEX7171	Emerging technologies	Pass in 60 credits at level 3 or above
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)]

### Alternative Courses for the academic year 2019/20

Course (Revised Curriculum)		Alternative Course to offer in 2019/20
EEX5352	Power systems II	EEX5832 Power systems II
EEX5338	High voltage engineering	EEX5538 High voltage engineering & electrical machines
EEX5348	Electrical machines and drives	None
EEX5351	Digital electronic systems	EEX6351 Digital Electronic systems
EEX5453	Power electronics	None
DMX5403	Control systems Engineering	DMX4543 Control System engineering
MHZ5554	Engineering mathematics IV	MHZ5530 Engineering Mathematics III
CVM5401	Accounting for engineers	None
EEX6354	Comprehensive electrical engineering design	None
EEX6182	Research methodology and project identification (Electrical engineering)	None
EEX6441	Electromagnetism and wave propagation	EEX6541 Field theory
EEW6502	Industrial training II (Electrical power - undergraduate)	EEW5002 Industrial Training II (Power-undergraduate)
DMM6601	Management for Engineers	DMM5836 Management for Engineers
EEX7231	Advanced circuit design and analysis	EEX5531 Network theory

<b>Course (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>	
EEX7432	Power systems planning, operations and control	EEX6832	Power systems planning
EEY7882	Engineering research project [Electrical]	EEY6D95	Individual project – Type B (Computer, Electrical, Electronic and Communication)
EEX5434	Data communications and networking	EEX5534	Data Communications
EEX5360	Signals and systems		None
EEX5280	Creative design		None
EEX6450	Analog electronic systems & Instrumentation	EEX6550	Analog Electronic Systems
EEX6253	Physical and optoelectronics	EEX5543	Physical & Opto Electronics
TAX6556	Ergonomics	TAX6539	Ergonomics
EEX7353	Power electronic applications and drives		None
EEX7342	Advanced control engineering	EEX6542	Modern Control Systems
EEX7241	Neural networks & fuzzy logic applications		None
EEX7171	Emerging technologies		None
DMX7305	Renewable sources of energy	DMX6536	New and Renewable Sources of Energy
DMX7301	Thermal power generation	DMX6535	Thermal Power Generation

## Curriculum for Electronic & Communication Engineering Specialisation

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)		Prerequisites
<b>Level 3</b>		
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
<b>Level 4</b>		
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 in 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)

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)		Prerequisites
EEX3262	Introduction to Object Oriented Programming	EEX3417(CR)
EEX3266	Information Systems and Data Management	None
EEX3269	Mobile Application Development for Android	None

**Levels 5, 6 and 7 Compulsory Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>		<b>Prerequisites</b>
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(CR), AGM3203(P)
EEX5333	Communication Theory and Systems	EEX3336(P), EEX4330(P), MHZ4553(P), 36 credits pass in 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) and 75 Credit Pass from level 3 & 4
EEX5563	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 at level 3 and above], EEX4351(P), EEX4330 (P),EEW4403(CR),
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 level 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	AGM4307(P), CVM5401(CA)
EEX6183	Research methodology and project identification (Electronics and Communication)	Pass in 60 credits
EEX7355	Comprehensive Electronics Design	EEX4351 (P), EEX5333 (CR), MHZ3551 (P), MHZ3552 (P), AGM3203 (P)
EEX7333	Microwave Devices and Antennas	EEX6441(P), MHZ4553(P), Pass in 80 credits in levels 3 and above
EEY7883	Engineering Research Project (Electronics and Communication)	Pass in 80 credits including 50 credits Pass in X category courses

**Levels 5, 6 and 7 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Course</b>		<b>Prerequisites</b>
EEX5280	Creative Design	45 credits pass
EEX5346	Embedded Systems	[EEX3417(P), EEX3336(P), EEX3351(P), EEX4436(CA), EEX4351(CA), [EEX5335(CR) or EEX5563(CR)], MHJ5342(CR)]
EEX5453	Power electronics	EEX4351(CA), EEX4331(CA), [EEX4542(CA) or EEX4332(P)], Pass in 36 credits at level 3
EEX7434	Digital Signal Processing	EEX5360(P), Pass in 45 credits
EEX7343	Optical Communications	EEX6253(CA), EEX5333(P), Pass in 80 credits in level 3 and above
DMX7304	Factory Automation	DMX4409(P), DMX5403 (P), DMX7303(CR)
EEX7436	Processor Design	EEX5351 (CA), [EEX5563(CA) or EEX5536(CA)], EEX3417(P), AGM3203(P), MHZ3551(P), EEX3336(P), EEX4436(P)
EEX7342	Advanced Control Engineering	DMX5403(P), MHZ5554(P), Pass in 80 credits in level 3 and above
EEX7339	Information Theory and Coding	MHZ4553(P), EEX5333(P), Pass in 80 credits in level 3 and above
EEX7353	Power Electronic Applications and Drives	EEX5453(CA), EEX6354(P), EEX5352(CA), Pass in 60 credits at level 3 and 4 including MHZ4553(P)

**Alternative Courses for the academic year 2019/20**

<b>Course (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>
EEX5150	Electronic Circuit Design	None
EEX5360	Signals and Systems	None
EEX5434	Data Communications & Networking	EEX5534 Data Communications
EEX5333	Communication Theory and Systems	EEX5533 Communication Theory & Systems
EEX5351	Digital Electronic Systems	EEX6351 Digital Electronic systems
DMX5403	Control Systems Engineering	DMX4543 Control System engineering
EEX5563	Computer Architecture and Operating Systems	None
MHZ5554	Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
CVM5401	Accounting for Engineers	None
EEW5403	Industrial Training II [Electronic and Communication]	EEW5003 Industrial training II (Communication-undergraduate)
EEX6339	Wireless Communications	EEX6539 Wireless Communication
EEX6253	Physical and Optoelectronics	EEX5543 Physical & Opto Electronics
EEX6450	Analog Electronic Systems and Instrumentation	EEX6550 Analog Electronic Systems



<b>Course (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>
EEX6441	Electromagnetism and Wave Propagation	EEX6541 Field theory
DMM6601	Management for Engineers	DMM5836 Management for Engineers
EEX6183	Research methodology and project identification (Electronics and Communication)	None
EEX7355	Comprehensive Electronics Design	None
EEX7333	Microwave Devices and Antennas	EEX6543 Microwave Engineering & Applications
EEY7883	Engineering Research Project (Electronics and Communication)	EEY6A96 Group project (Computer, Electrical, Electronic and Communication)
EEX5280	Creative Design	None
EEX7434	Digital Signal Processing	EEX6534 Digital Signal Processing
EEX7343	Optical Communications	None
DMX7304	Factory Automation	DMX6570 Factory Automation
EEX7436	Processor Design	EEX6536 Processor design
EEX7342	Advanced Control Engineering	EEX6542 Modern Control Systems
EEX7339	Information Theory and Coding	None
EEX7353	Power Electronic Applications and Drives	None

## Curriculum for Mechanical Engineering Specialization

### Levels 3 and 4 compulsory courses

Course (Revised Curriculum)		Prerequisites
<b>Level 3</b>		
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
<b>Level 4</b>		
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)

**Levels 5, 6 and 7 Compulsory Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
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)
DMX6180 Research Methodology and Project Identification (Mechanical/Mechatronics Engineering)	30 credits at Level 4 or above (P)
DMX6301 Industrial Engineering	DMX4212(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)
DMX7301 Thermal Power Generation	[DMX4202(P) and DMX5205(CA)] or [DMX3401(P) and EEX5348(CA)]
DMX7402 Analysis of Manufacturing Systems & Processes	DMX4212(P), MHZ5554(CA)
DMY7880 Engineering Research Project (Mechanical)	DMX6180(CA), 50 credits in X category courses (P)

**Levels 5, 6 and 7 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
DMX5208 Automobile Engineering	DMX4208(P)
DMX5209 Automotive Electronics	DMX3304 (P), DMX4307(CA), DMX4308(CA), EEX4436(CA)
DMX5210 Vehicle Dynamics and Design of Automotive Components	DMX4208(P)
DMX5211 Plant Maintenance	DMX4212(CA)
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)

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
DMX7303 Control of Robotics Manipulators	DMX5201(P), DMX5403(P), MHZ5554 (P)
DMX7304 Factory Automation	DMX4409(P), DMX7303(CR), DMX5403(P)
DMX7305 Renewable Sources of Energy	MHZ4553(P), {[DMX3401(P) and EEX4542(P)] or [DMX4202(P) and DMX4203(P)]}

### Alternative Courses for the academic year 2019/20

<b>Course (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
DMX5201 Advanced Engineering Mechanics	DMX5533 Dynamics of Mechanical Systems
DMX5302 Strength of Materials II	DMX5532 Strength of Materials II
DMX5403 Control Systems Engineering	DMX4543 Control Systems Engineering
DMX5204 Materials Engineering	DMX4533 Materials engineering
DMX5205 Applied Thermodynamics II	DMX5531 Applied Thermodynamics
DMX5206 Applied Fluid dynamics II	DMX6578 Fluid Mechanics
DMX5307 Mechanical Engineering Design Project	None
MHZ5554 Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
CVM5401 Accounting for Engineers	DMM5836 Management for Engineers
DMX6180 Research Methodology and Project Identification (Mechanical Engineering)	None
DMX6301 Industrial Engineering	DMX6540 Industrial Engineering
DMX6302 Energy, Environment and Sustainability	
DMM6601 Management for Engineers	DMM5836 Management for Engineers
DMW6801 Industrial Training (Mechanical - Undergraduate)	DMW5002 Industrial Training II (Mechanical)
DMX7301 Thermal Power Generation	DMX6535 Thermal Power Generation
DMX7402 Analysis of Manufacturing Systems & Processes	None
DMY7880 Engineering Research Project (Mechanical)	DMY6A98 Individual Project Type A (Mechanical)

### Excluded Combinations

DMX4533 and DMX3203	DMX6578 and DMX4203
DMX5531 and DMX4202	DMX5577 and DMX4306
DMM5836 and AGM4307	

## Curriculum for Mechatronics Engineering Specialization

### Levels 3 and 4 Compulsory Courses

Course (Revised Curriculum)		Prerequisites
<b>Level 3</b>		
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
<b>Level 4</b>		
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)

**Levels 5, 6 and 7 Compulsory Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Course (Revised Curriculum)</b>	<b>Prerequisites</b>
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(CR), DMX4409(CR)
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)
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)
DMX7303 Control of Robotics Manipulators	DMX5201(P), DMX5403(P), MHZ5554(P)
DMX7304 Factory Automation	DMX4409(P), DMX5403(P), DMX7303(CR)
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)

**Levels 5, 6 and 7 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites

<b>Course (Revised Curriculum)</b>	<b>Prerequisites</b>
DMX5204 Materials Engineering	DMX3203(P)
DMX5211 Plant Maintenance	DMX4212(CA)
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)
DMX7301 Thermal Power Generation	[DMX4202(P) and DMX5205(CA)] or [DMX3401(P) and EEX5348(CA)]

<b>Course (Revised Curriculum)</b>	<b>Prerequisites</b>
DMX7305 Renewable Sources of Energy	DMX4202(P), DMX4203(P), MHZ4553(P)
DMX7402 Analysis of Manufacturing Systems & Processes	DMX4212(P), MHZ5554(CA)
DMY4100 Special Group Project (Mechatronics Engineering)	60 credits (P)

### Alternative Courses for the academic year 2019/20

<b>Course (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
DMX5201 Advanced Engineering Mechanics	DMX5533 Dynamics of Mechanical Systems
DMX5403 Control Systems Engineering	DMX4543 Control Systems Engineering
DMX5313 Power Electronics and Motor Drives	DMX5570 Power Electronics & Motor Drives
DMX5314 Machine Vision	DMX5571 Machine Vision
DMX5315 Artificial Intelligence	DMX6573 Advanced Control Engineering
DMX5316 Mechatronics Product Design	DMX4573 Mechatronics Product Design
MHZ5554 Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
CVM5401 Accounting for Engineers	DMM5836 Management for Engineers
DMX6180 Research Methodology and Project Identification (Mechatronics Engineering)	None
DMX6305 Modern Control Systems	DMX6573 Advanced Control Engineering
DMX6306 Micro and Nano Electro Mechanical Systems	None
DMM6601 Management for Engineers	DMM5836 Management for Engineers
DMW6801 Industrial Training (Mechatronics - Undergraduate)	None
DMX7303 Control of Robotics Manipulators	DMX6571 Robotics
DMX7304 Factory Automation	DMX6570 Factory Automation
DMX7306 Intelligent Control Systems	DMX6573 Advanced Control Engineering
DMY7881 Engineering Research Project (Mechatronics Engineering)	None
DMX5204 Materials Engineering	DMX4533 Materials engineering
DMX5211 Plant Maintenance	
DMX5212 Computer Aided design and Manufacturing	DMX6534 Advanced Manufacturing Technology
DMX6303 Nano Technology	None
DMX6304 Computational Fluid Dynamics	None
DMX7301 Thermal Power Generation	DMX6535 Thermal Power Generation
DMX7305 Renewable Sources of Energy	DMX6536 New and Renewable Sources of Energy
DMX7402 Analysis of Manufacturing Systems & Processes	None

## Curriculum for Textile and Clothing Engineering Specialisation

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)		Prerequisites
<b>Level 3</b>		
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
<b>Level 4</b>		
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)

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)		Prerequisites
TAX4462	Pattern Development	15 credits(P)
TAX4438	Production Planning and organisation	15 credits(P)

### Levels 5, 6 and 7 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites

Courses (Revised Curriculum)		Prerequisites
DMX5403	Control Systems Engineering	MHZ5554 (CR), 30 credits in X category courses (P)
TAX5551	Textile Colouration	45 credits(P)
TAX5547	Plant Utilities	45 credits(P)
TAX5648	Fabric Structure and Analysis	45 credits(P)



Courses (Revised Curriculum)		Prerequisites
TAX5349	Nonwoven Textiles	45 credits(P), [TAX3458(P) or TAX3530(P)]
MHZ5554	Engineering Mathematics IV	MHZ3551(P), MHZ3552(P), MHZ4553(CA)
CVM5401	Accounting for Engineers	AGM4307(P)
TAX6180	Research Methodology and Project Identification (Textile and Clothing Engineering)	Pass 45 credits at level 4 and above
TAX6556	Ergonomics	Pass 45 credits at level 4 and above
DMM6601	Management for Engineers	CVM5401 (CA), 60 credits (P)
TAX7368	Specialty Fabrics	Pass 45 credits at level 4 and above, TAX4351(P), TAX4560(P)
TAX7464	Yarn & Fabric Mechanics	Pass 45 credits at level 4 and above, TAX4560(P), MHZ3551(P), MHZ3552(P)
TAX7369	Engineering Aspects of Weaving	Pass 45 credits at level 4 and above, TAX4560(P)
TAY7880	Engineering Research Project (Textile & Clothing Engineering)	Pass in 45 credits at level 4 and above, TAX6180(CA)
TAY7381	Comprehensive Design Project (Group project-Textile & Clothing Engineering)	Pass in 45 credits at level 4 and above, TAX6180(CA)

Industrial Training (Select any 2 out of 5 training courses)		
TAW4401	Specific training I (Apparel)	[TAX3331(P), TAI4438(CR), Pass in 15 credits] or [TAX3331(CA), TAI4438(CR), Pass in 18 credits]
TAW5403	Specific training II (Yarn Manufacture)	[TAX3459(P), Pass in 15 credits] or [TAX3459(CA), Pass in 18 credits]
TAW5404	Specific training II (Weaving)	[TAX4560(P), Pass in 15 credits] or [TAX4560(CA), Pass in 18 credits]
TAW5405	Specific training II (Chemical processing)	[TAX5551(CR) or TAX4571(P), Pass in 15 credits] or [TAX4571(CA), Pass in 18 credits]
TAW5406	Specific training II (Knitting)	[TAX4361(P) or TAX4441(P), Pass in 15 credits] or [TAX4361(CA) or TAX4441(CA), Pass in 18 credits]

### Levels 5, 6 and 7 Elective Courses

Courses (Revised Curriculum)		Prerequisites
TAJ5353	History and Traditions of Clothing	45 credits (P)
TAX6454	Technical Textiles	Pass 45 credits at level 4 and above
TAX6263	Textile Product Engineering	Pass 45 credits at level 4 and above

<b>Courses (Revised Curriculum)</b>		<b>Prerequisites</b>
TAX6265	Advanced Weaving Preparation and Machinery	Pass 45 credits at level 4 and above, TAX4560(P)
TAX6366	Yarn Manufacture II	Pass in 45 credits at level 4 and above, TAX3459(P)
TAX6367	Advanced Colouration	Pass 45 credits at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368	Nano Technology for Textiles	Pass 45 credits at level 4 and above, [TAX5551(CA) or TAX4571 (P)], [TAX3458(P) or TAX3530(P)]

### Alternative Courses for the academic year 2019/20

<b>Courses (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>
DMX5403	Control Systems Engineering	DMX4543 Control Systems Engineering
TAX5551	Textile Colouration	TAX4532 Textile Coloration
TAX5547	Plant Utilities	TAX5534 Plant Utilities
TAX5648	Fabric Structure and Analysis	TAI3536 Fabric Structure and Analysis
TAX5349	Nonwoven Textiles	TAX6564 Nonwoven Textiles
MHZ5554	Engineering Mathematics IV	MHZ5530 Engineering Mathematics III
CVM5401	Accounting for Engineers	None
TAX6180	Research Methodology and Project Identification (Textile and clothing Engineering)	None
TAX6556	Ergonomics	TAX6539 Ergonomics
DMM6601	Management for Engineers	DMM5836 Management for Engineers
TAX7368	Speciality Fabrics	TAX6563 Specialty Fabrics
TAX7464	Yarn and Fabrics Mechanics	TAX5532 Yarn and Fabrics Mechanics
TAX7369	Engineering Aspects of Weaving	None
TAY7880	Engineering Research Project (Textile & Clothing Engineering)	None
TAY7381	Comprehensive Design Project (Group Project-Textile & Clothing Engineering)	None
TAJ5353	History and Traditions of Clothing	TAJ5342 History and Traditions of Clothing
TAX6454	Technical Textiles	TAX6533 Technical Textiles
TAX6263	Textile Product Engineering	TAX6335 Textile Product Engineering
TAX6265	Advanced Weaving Preparation and Machinery	TAX6560 Advanced woven fabric technology
TAX6366	Yarn Manufacture II	TAX6561 Yarn Manufacture II
TAX6367	Advanced Colouration	TAX6362 Advanced Colouration
TAX6368	Nano Technology for Textiles	None
<b>Industrial Training</b>		
TAW5403	Specific training II (Yarn Manufacture)	TAW5003 Specific training II (Yarn Manufacture)
TAW5404	Specific training II (Weaving)	TAW5004 Specific training II (Weaving)
TAW5405	Specific training II (Chemical processing)	TAW5005 Specific training II (Chemical processing)
TAW5406	Specific training II (Knitting)	TAW5006 Specific training II (Knitting)

### Excluded Combinations

TAX6568 and DMX6303

## Exemptions applicable for Bachelor of Technology Honours in Engineering Study Programme

### Qualifications in English Language

Qualification	Course exempted
G C E (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 Civil engineering and related disciplines

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

Qualification	Courses		
	Level 3	Level 4	Level 5
BSc. Surveying Sciences, Sabaragamuwa University Sri Lanka	MHZ3551 EEX3410 MHZ3552	CVX4342	CVX5440
Diploma in Irrigation Technology, International Training Institute of Irrigation & Water Management, Kothmale	CVX3340	CVX4342 CVW4802 CVX4347	

Note: Those who have satisfied **only the academic requirements** without **industrial training components** in HNDE (civil), NDET (Civil), NDT (Civil) or NDES (civil) can be granted exemptions as listed, without **Industrial training** courses at Levels 3 & 4

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

Qualification	Courses		
	Level 3 (and 4)	Level 4	Level 5/6
NCT (Electrical and Electronics)	EEX3410		
NCIT (Electrical and Electronics)	EEX3410 EEX3336 EEX3331 EEX4331 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332	
NAB Special Apprentice (AIT) –Electrical/Electronic	EEX3410 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEW4301 or EEW4403	
Diploma in Electronics and Communications, Jaffna College Institute of Technology	DMX3305 EEX3336 AGM3203 EEX3331 EEX3410 (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	EEX4364 EEX4366 EEX4435 EEI4369 EEY4189	EEX5467 or EEX5567
Higher National Diploma in IT, Advanced Technological Institute	EEX3336	EEX4435 EEX4347	

Qualification	Courses		
	Level 3 (and 4)	Level 4	Level 5/6
HNDE (Electrical Power) New curriculum from 2014	EEX3410      EEX3331 DMX3305      MHZ3551 AGM3203      MHZ3552 DMX3401      DMX3107 EEX3336 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 or (EEX4542 & EEX4448) {(EEW4301 or EEW4403 ) and EEW4502}	
National Diploma in Technology (NDT) – Electronics and Telecommunications with Electrical Installations & Wiring Diagrams		EEX4434	
NDES* (Power) (New curriculum) NDT** (Electrical) (New curriculum)	EEX3410      EEX3331 DMX3305      EEX3336 AGM3203      MHZ3551 DMX3401      MHZ3552 DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 or (EEX4542 & EEX4448) EEX4434 EEX4436 {(EEW4301 or EEW4403 ) and EEW4502}	
NDT (Electronic & telecom.) or NDES (Electronics) or NDES (Telecommunication)	EEX3331      EEX3336 EEX3410      MHZ3551 DMX3305      MHZ3552 AGM3203      DMX3107 DMX3401 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4332 EEX4436 {(EEW4301 or EEW4403 ) and EEW5403}	
NDES* (Electronics) or NDES *(Telecommunication) (New curriculum)	EEX3410      EEX4332 DMX3305      EEX3336 AGM3203      MHZ3551 DMX3401      MHZ3552 EEX3331      DMX3107 (EEX3351 & EEX4351) or DMX3304	EEX4331 EEX4330 EEX4436 {(EEW4301 or EEW4403 ) and EEW5403}	

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

\*Effective year 2003 onwards    \*\*Effective year 2008 onwards

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

### 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 <b>or</b> 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	

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

Qualification	Courses			
	Level 3		Level 4	Level 5
NDES (Marine)	AGM3203 DMX3107 DMX3203 DMX3206 DMX3302 DMX3304	DMX3305 DMX3401 EEX3410 MHZ3551 MHZ3552	DMX4201  DMX4204  DMX4205	
BSc (Defence studies) in Aeronautical Engineering	AGM3203 DMX3107 DMX3304 DMX3305	DMX3401 EEX3410 MHZ3551 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

### 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 TAX4438 TAX4540 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 TAX4462 TAX4539 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		



Qualification	Courses		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 (and 6)
College Diploma in Clothing Technology and Management (Fulltime), Brandix College of Clothing Technology, Ratmalana	TAX3331	TAX4539 TAW4401 TAX4438 TAX4540 TAX4462	TAX5648
NDT (Textile) (Old Curriculum-till 2007)	DMX3305 TAX3458 AGM3203 TAX3459 DMX3401 (TAX5648 EEX3410 or MHZ3551 TAX3331) MHZ3552 DMX3107	TAX4539 TAX4560	TAX5551  Any two of TAW5403, TAW5404, TAW5405, TAW5406
NDT (Textile) (Old Curriculum-till 2007) without completion of training	DMX3305 TAX3458 AGM3203 TAX3459 DMX3401 (TAX5648 EEX3410 or MHZ3551 TAX3331) MHZ3552	TAX4539 TAX4560	TAX5551
NDT (Clothing) (Old Curriculum-till 2007)	DMX3305 TAX3458 AGM3203 TAX3459 DMX3401 DMX3107 EEX3410 (TAX5648 MHZ3551 or MHZ3552 TAX3331)	TAX4539 Any two of TAX4540 TAW4401 TAX4438 TAW5403 TAX4462 TAW5404 TAW5405 TAW5406	TAX5551
NDT (Clothing) (Old Curriculum-till 2007) without completion of training	DMX3305 TAX3458 AGM3203 TAX3459 DMX3401 (TAX5648 EEX3410 or MHZ3551 TAX3331) MHZ3552	TAX4539 TAX4540 TAX4462 TAX4438	TAX5551
NDT(Textile and Clothing Technology) – New Curriculum(after 2007)	DMX3305 TAX3458 AGM3203 TAX3459 DMX3401 TAX3331 EEX3410 DMX3302 MHZ3551 DMX3107 MHZ3552	TAX4539 Any two of TAX4540 TAW4401 TAX4560 TAW5403 DMX4204 TAW5404 TAX4438 TAW5405 TAX4462 TAW5406	TAX5648 TAX5551
NDT(Textile and Clothing Technology) – New Curriculum(after 2007) without completion of training	DMX3305 TAX3458 AGM3203 TAX3459 DMX3401 TAX3331 EEX3410 DMX3302 MHZ3551 MHZ3552	DMX4204 TAX4539 TAX4540 TAX4438 TAX4560 TAX4462	TAX5648 TAX5551
NDT (Polymer Technology)	DMX3305 DMX3302 AGM3203 EEX3410 DMX3401 MHZ3551 DMX3206 MHZ3552 DMX3203 DMX3107	DMX4204  DMX4201	

Qualification	Courses		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 (and 6)
Diploma in Clothing Manufacture – CITI, Ratmalana	TAX3331	TAX4539    TAW4401 TAX4438	TAW5401
Diploma in Polymer Technology – CITI, Ratmalana		TAX4539	
TAI3540- Pattern construction and TAI5538 – Advanced pattern construction, OUSL		TAX4462	

**Licentiate ship 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		

**Abbreviations**

Abbreviation	Description	Abbreviation	Description
GCE (O/L)	General Certificate in Education (Ordinary Level)	NDET	National Diploma in Engineering Technology
GCE (A/L)	General Certificate in Education (Advanced Level)	BIT	Bachelor of Information Technology
NDT	National Diploma in Technology	GITI	Galgamuwa Irrigation Training Institute
NDES	National Diploma in Engineering Science	NIBM	National Institute of Business Management
NDA	National Diploma in Agriculture	IESL	Institution of Engineers Sri Lanka
HNDA	Higher National Diploma in Agriculture	EC	Engineering Council, UK
NCT	National Certificate in Technology	CEI	Council of Engineering Institutions, UK
NCIT	National Certificate for Industrial Technicians	SLITA	Sri Lanka Institute of Textile and Apparel
NAB	National Apprenticeship Board	CITI	Clothing Industry Training Institute
HNDE	Higher National Diploma in Engineering		

# **Bachelor of Industrial Studies Honours Degree 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 utilizing 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 field.
- 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 Quality 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 to the Programme of Study

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 in any stream, at the General Certificate of Education (Advanced Level) Examination, Sri Lanka, in one sitting 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,
- completed the Advanced Certificate in Apparel Technology offered by the Open University of Sri Lanka or
- completed any foundation Programme 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 passes from Biology, Chemistry, Physics or Agriculture at the General Certificate in Education (Advanced Level) Examination, Sri Lanka in one sitting, or
- completed foundation programme in Science offered by the Open University of Sri Lanka including Biology as a course or,
- Secured 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, S/he has to meet the following requirements (within a maximum of 15 academic years).

- (1) Successful completion of all compulsory courses for the selected specialization
- (2) Fulfil the level-wise and category-wise course credits as given in Table 3

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

Category	Minimum SLQF credits	Maximum SLQF 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 Subject to 4 credits at level 4 and 4 credits at level 5	8 Subject to 4 credits at level 4 and 4 credits at level 5
Computer literacy (K)	2	2
<b>Total</b>	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, 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 specialization, and
- (2) Fulfil Level-wise and Category-wise Credits for the Higher Diploma as given Table 4

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

Category	Minimum SLQF credits	Maximum SLQF 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 Subject to 4 credits at level 4 and 4 credits at level 5	8 Subject to 4 credits at level 4 and 4 credits at level 5
Computer literacy (K)	2	2
<b>Total</b>	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:

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

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

- 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 7): 34

A list of qualifications for which exemptions could be claimed is given in Page 61.

**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, and is named as the Revised Curriculum. The students who have enrolled the study programme up to the academic year 2017/18 are following the previous curriculum and is named as the Interim Curriculum.

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

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

From the academic year 2019/20, only levels 3 and 4 courses are available from the Revised Curriculum and levels 5, 6 and 7 courses will be available from the academic year 2019/20. The students enter the programme with prior qualifications (lateral entry) having obtained exemptions from the lower level courses may have to register for equivalent courses of the Interim Curriculum in 2019/20. Such equivalent courses have been listed alongside the courses of the Revised Curriculum where applicable.

## Curriculum for Agriculture Specialization

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)		Prerequisites
<b>Level 3</b>		
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
<b>Level 4</b>		
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 18 credits in level3, MHZ3458(P)

### Levels 5 and 6 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

Courses (Revised Curriculum)		Prerequisites
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(P)
AGJ5368	Indigenous Knowledge of Herbal Products	Pass in 68 credits
AGI6478	Hydrology and Water Resources	AGI4555(P), AGX6283(CR)
AGM6379	Agricultural Extension	Pass in 68 credits
AGJ6381	Rural Sociology	Pass in 68 credits
AGY6880	Individual Project (Agriculture)	MHZ3458(P), MHZ4357(P), AGZ5367(CR), AGI5166 (P), Pass in 15 credits at level 5 and 15 credits at level 5 or above.

**Levels 5 and 6 Elective Courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
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	None
AGX6387 Plantation Crop Technology	AGI3552(P)
AGX6490 Soil and Water Conservation	AGX4356(P), AGX5565(CR)
AGX6377 Precision Agriculture	None

**Industrial Training**

<b>Course (Revised Curriculum)</b>	<b>Prerequisites</b>
AGW4401 Specific Training I	AGI3551(P), AGI3552(P), Pass in 15 credits at level 3 or above
AGW5401 Specific Training II	AGW4401(P), Pass in 15 credits at level 4 or above

**Alternative Courses for the academic year 2019/20**

<b>Courses (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
AGI5364 Farm Power and Machinery	AGX5543 Farm Power and Machinery
AGI5166 Research Methodology	None
AGX5565 Soil Plant and Water Relationship	AGX5532 Soil Plant and Water Relationship
AGZ5367 Experimental Design	ADU4319 Design and Analysis of Experiments
AGJ5368 Indigenous Knowledge of Herbal Products	AGJ5540 Indigenous Knowledge of Herbal Products
AGI6478 Hydrology and Water Resources	AGX6535 Hydrology and Water Resources
AGM6379 Agricultural Extension	AGM5546 Agricultural Extension



<b>Courses (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
AGJ6381 Rural Sociology	AGJ4533 Rural Sociology
AGY6880 Individual Project (Agriculture)	AGY6D96 Individual Project (Agriculture)
AGI5569 Molecular Biology and Biotechnology	AGI5541 Agricultural Biotechnology
AGI5470 Food Microbiology	None
AGI5471 Animal Biology	AGI4538 Agricultural Biology II
AGI5572 Fisheries and Aquaculture	AGI5530 Fisheries and Aquaculture
AGI5373 Agro-Forestry	None
AGI5274 Fruit Crops and Cut Flower Production	AGI6238 Fruit Crop and Cut Flower Production
AGX5415 Horticulture and Landscape Technology	None
AGX5376 Crop Processing	None
AGX5277 Food Safety and Quality Management Systems	None
AGM5475 Economics and Management	AGM4534 Agricultural Economics and Management
AGI6582 Food Processing	AGX6536 Food Processing
AGI6585 Applications in Biotechnology	AGI6550 Advanced Biotechnology
AGI6486 Field and Laboratory Techniques in Plant Protection	None
AGX6283 Ground Water and Resource Management	AGI6232 Ground Water Resources Management
AGX6284 Impacts of Climate Change on Water Resource	AGI6237 Impact of Climate Change on Water Resources
AGX6387 Plantation Crop Technology	None
AGX6490 Soil and Water Conservation	AGX4532 Soil and Water Conservation
AGX6377 Precision Agriculture	None
AGW4401 Specific Training I	AGW4002 Industrial Training I (Agriculture)
AGW5401 Specific Training II	AGW5002 Industrial Training II (Agriculture)

## Curriculum for Apparel Production & Management Specialization

### Levels 3 and 4 Compulsory Courses

Course (Revised Curriculum)	Prerequisites
<b>Level 3</b>	
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
TAZ3536 Statistics for Industrial Studies	None
TAK3237 Introduction to Computer Applications	None
<b>Level 4</b>	
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 Specific Training I (Apparel)	[TAX3331(P), TAI4438(CR), Pass in 15 credits] or [TAX3331(CA), TAI4438(CR), Pass in 18 credits]

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)	Prerequisites
LLJ3245 Introduction to Laws of Sri Lanka	None
MHJ4241 History of Technology	20 credits (P)

### Levels 5 and 6 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

Courses (Revised Curriculum)	Prerequisites
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)]
TAZ5550 Quantitative Techniques	45 credits(P), TAZ3536(P)

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
TAW5401 Specific Training II (Apparel)	TAW4401(CR), TAX4540(CA), 15 credits (CA) at level 4 and above
TAX6455 Fabric Technology	Pass 45 credits at level 4 and above
TAX6556 Ergonomics	Pass 45 credits at level 4 and above
TAX6454 Technical Textiles	Pass 45 credits at level 4 and above
TAX6263 Textile Product Engineering	Pass 45 credits in level 4 and above
TAM6457 Fashion Marketing	Pass 45 credits at level 4 and above
TAY6882 Research Project (Apparel Production)	Pass 45 credits at level 4 and above, TAI5246(CA)

### Levels 5 and 6 Elective Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Course (Revised Curriculum)</b>	<b>Prerequisites</b>
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	Pass in 45 credits at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368 Nano Technology for Textiles	Pass in 45 credits at level 4 and above, [TAX3548(P) or TAX3530(P)], [TAX5551(CA) or TAX4571(P)]

### Alternative Courses for the academic year 2019/20

<b>Courses (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
TAI5246 Current Topics in Textile and Clothing	TAI5339 Current Topics in Textile and Clothing
TAX5547 Plant Utilities	TAX5534 Plant Utilities
TAX5648 Fabric Structure and Analysis	TAI3536 Fabric Structure and Analysis
TAX5349 Nonwoven Textiles	TAX6564 Nonwoven Textiles
TAZ5550 Quantitative Techniques	TAZ5544 Quantitative Techniques
TAW5401 Specific Training II (Apparel)	None
TAX6455 Fabric Technology	TAX6565 Fabric Technology
TAX6556 Ergonomics	TAX6539 Ergonomics
TAX6454 Technical Textiles	TAX6533 Technical Textiles
TAX6263 Textile Product Engineering	TAX6335 Textile Product Engineering
TAM6457 Fashion Marketing	TAM6540 Fashion Marketing
TAY6882 Research Project (Apparel Production)	TAY6D95 Individual project -Type B (Textile and Apparel)
TAX5551 Textile Colouration	TAX4532 Textile Colouration

<b>Courses (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
TAI5552 Principles of Fashion Design	TAI5543 Principles of Fashion Design
MHJ5343 Nature of Science	MHJ5531 Nature of Science
MHJ5342 Technology, Society and Environment	MHJ5533 Technology, Society and Environment
TAJ5353 History and Traditions of Clothing	TAJ5342 History and Traditions of Clothing
TAX6367 Advanced Colouration	TAX6362 Advanced Colouration
TAX6368 Nano Technology for Textiles	None

**Excluded Combinations**

TAX3458 and TAX3530	TAI4371 and TAI5552
TAX3370 and TAX5551	TAI4472 and TAI5552
TAX4361 and TAX4441	TAX4571 and TAX5551

## Curriculum for Fashion Design and Product Development Specialization

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)	Prerequisites
<b>Level 3</b>	
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
TAZ3536 Statistics for Industrial Studies	None
TAI3270 Fashion Illustration I	None
TAK3237 Introduction to Computer Applications	None
<b>Level 4</b>	
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 Specific Training I (Fashion)	TAI4371(CR), TAI4472(CR), TAX3331(P), Pass in 15 credits

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)	Prerequisites
LLJ3245 Introduction to Laws of Sri Lanka	None
MHJ4241 History of Technology	20 credits(P)

### Levels 5 and 6 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

Courses (Revised Curriculum)	Prerequisites
TAI5375 Design Through Draping	45 credits(P), TAI3533(P)
TAI5478 Fashion Design Development	45 credits(P), TAJ4473(P)
TAI5579 Theoretical aspects of visual presentation and exhibition design	45credits(P), TAI5578(CR)
TAZ5550 Quantitative Techniques	45 credits(P), TAZ3536(P)
TAY5384 Inspiration of Fashion Designing	45 credits(P), TAI4473(CA), TAI4474(CA)

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
TAW5402 Specific training II (Fashion Design & Product Development)	TAW4402(CR), TAX4540(CA), TAI4474(CA), Pass in 15 credits at level 4 or above
TAM6457 Fashion Marketing	Pass 45 credits at level 4 and above
TAX6556 Ergonomics	Pass 45 credits at level 4 and above
TAY6885 Creating and exhibiting fashion products	TAY5384(P), TAI5579(CA), Pass in 45 credits at level 4 and 5
TAI6580 Fashion Show Production	Pass in 45 credits at level 4 & above, TAI4471(P)

### Levels 5 and 6 Elective Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Course (Revised Curriculum)</b>	<b>Prerequisites</b>
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), TAJ4473 (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	Pass 45 credits at level 4 and above
TAX6454 Technical Textiles	Pass 45 credits at level 4 and above
TAX6263 Textile Product Engineering	Pass 45 credits at level 4 and above
TAX6367 Advanced Colouration	Pass in 45 credits at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368 Nano Technology for Textiles	Pass in 45 credits at level 4 and above, [TAX3548(P) or TAX3530(P)], [TAX5551(CA) or TAX4571(P)]

### Alternative Courses for the academic year 2019/20

<b>Courses (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
TAI5375 Design Through Draping	TAI5348 Design Through Draping
TAI5478 Fashion Design Development	TAI5563 Fashion Design Development
TAI5579 Theoretical aspects of visual presentation and exhibition design	TAI6869 Visual presentation and exhibition design
TAZ5550 Quantitative Techniques	TAZ5544 Quantitative Techniques
TAY5384 Inspiration of Fashion Designing	TAY6390 Inspiration of Fashion Design
TAW5402 Specific training II (Fashion Design & Product Development)	
TAM6457 Fashion Marketing	TAM6540 Fashion Marketing
TAX6556 Ergonomics	TAX6539 Ergonomics
TAY6885 Creating and exhibiting fashion products	None
TAI6580 Fashion Show Production	TAI6549 Fashion Show Production
TAX5551 Textile Colouration	TAX4532 Textile Colouration
TAI5376 Computer Aided Pattern Drafting	TAI5354 Computer Aided Pattern Drafting

<b>Courses (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>	
TAI5277	Computer Aided Fashion Illustration	TAI5359	Computer Aided Fashion Illustration
MHJ5343	Nature of Science	MHJ5531	Nature of Science
MHJ5342	Technology, Society and Environment	MHJ5533	Technology, Society and Environment
TAJ5353	History and Traditions of Clothing	TAJ5342	History and Traditions of Clothing
TAX6455	Fabric Technology	TAX6565	Fabric Technology
TAX6454	Technical Textiles	TAX6533	Technical Textiles
TAX6263	Textile Product Engineering	TAX6335	Textile Product Engineering
TAX6367	Advanced Colouration	TAX6362	Advanced Colouration
TAX6368	Nano Technology for Textiles		None

**Excluded Combinations**

TAX3458 and TAX3530	TAI4371 and TAI5552
TAX3370 and TAX5551	TAI4472 and TAI5552
TAX4361 and TAX4441	TAX4571 and TAX5551

## Curriculum for Textile Manufacture Specialization

### Levels 3 and 4 Compulsory Courses

Courses (Revised Curriculum)	Prerequisites
<b>Level 3</b>	
TAX3458 Fibre Science & Technology	None
TAX3459 Yarn Manufacture 1	None
TAX3370 Textile Preparation	None
TAX3331 Garment Analysis and Sewing Machinery	None
TAI3332 Garment Accessories	None
TAZ3536 Statistics for Industrial Studies	None
TAM3234 Basics of Human Resource Management	None
TAM3535 Management Studies	None
TAK3237 Introduction to Computer Applications	None
<b>Level 4</b>	
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)

### Levels 3 and 4 Elective Courses

Courses (Revised Curriculum)	Prerequisites
LLJ3245 Introduction to Laws of Sri Lanka	None
MHJ4241 History of Technology	20 credits (P)

### Levels 5 and 6 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

Courses (Revised Curriculum)	Prerequisites
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)
TAZ5550 Quantitative Techniques	45 credits(P), TAZ3536(P)
TAX6556 Ergonomics	Pass 45 credits at level 4 and above
TAX6263 Textile Product Engineering	Pass 45 credits at level 4 and above
TAY6883 Research Project (Textile Manufacture)	Pass 45 credits at level 4 and above, TAI5246(CA)



**Levels 5 and 6 Elective courses**

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
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	Pass 45 credits at level 4 and above
TAX6454 Technical Textiles	Pass 45 credits at level 4 and above
TAX6265 Advanced Weaving Preparation and Machinery	Pass 45 credits at level 4 and above , TAX4560(P)
TAX6366 Yarn Manufacture II	Pass in 45 credits at level 4 and above, TAX3459(P)
TAX6367 Advanced Colouration	Pass in 45 credits at level 4 and above, [TAX4571(P) or TAX5551(CA)]
TAX6368 Nano Technology for Textiles	Pass in 45 credits at level 4 and above, [TAX3548 (P) or TAX3530(P)], [TAX5551 (CA) or TAX4571(P)]

**Industrial Training**

<b>Courses (Revised Curriculum)</b>	<b>Prerequisites</b>
TAW4401 Specific training I (Apparel)	[TAX3331(P), TAI4438(CR), Pass in 15 credits] or [TAX3331(CA), TAI4438(CR), Pass in 18 credits]
TAW5403 Specific training II (Yarn Manufacture)	[TAX3459(P), Pass in 15 credits] or [TAX3459(CA), Pass in 18 credits]
TAW5404 Specific training II (Weaving)	[TAX4560(P), Pass in 15 credits] or [TAX4560(CA), Pass in 18 credits]
TAW5405 Specific training II (Chemical processing)	[TAX5551(CR) or TAX4571(P), Pass in 15 credits] or [TAX4571(CA), Pass in 18 credits]
TAW5406 Specific training II (Knitting)	[TAX4361(P) or TAX4441(P), Pass in 15 credits] or [TAX4361(CA) or TAX4441(CA), Pass in 18 credits]

**Alternative Courses for the academic year 2019/20**

<b>Courses (Revised Curriculum)</b>	<b>Alternative Course to offer in 2019/20</b>
TAX5648 Fabric Structure and Analysis	TAI3536 Fabric Structure and Analysis
TAX5349 Nonwoven Textiles	TAX6564 Nonwoven Textiles
TAX5547 Plant Utilities	TAX5534 Plant Utilities
TAI5246 Current topics in Textile and Clothing	TAI5339 Current topics in Textile and Clothing
TAI5552 Principles of Fashion Design	TAI5543 Principles of Fashion Design
TAZ5550 Quantitative Techniques	TAZ5544 Quantitative Techniques
TAX6556 Ergonomics	TAX6539 Ergonomics
TAX6263 Textile Product Engineering	TAX6335 Textile Product Engineering
TAY6883 Research Project (Textile Manufacture)	TAY6D95 Individual Project – Type B (Textile and Apparel)
MHJ5343 Nature of Science	MHJ5531 Nature of Science

<b>Courses (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>	
MHJ5342	Technology, Society and Environment	MHJ5533	Technology, Society and Environment
TAJ5353	History and Traditions of Clothing	TAJ5342	History and Traditions of Clothing
TAM6457	Fashion Marketing	TAM6540	Fashion Marketing
TAX6454	Technical Textiles	TAX6533	Technical Textiles
TAX6265	Advanced Weaving Preparation and Machinery	TAX6560	Advanced woven fabric technology
TAX6366	Yarn Manufacture II	TAX6561	Yarn Manufacture II
TAX6367	Advanced Colouration	TAX6362	Advanced Colouration
TAX6368	Nano Technology for Textiles	None	
TAW5403	Specific training II (Yarn Manufacture)	TAW5003	Specific training II (Yarn Manufacture)
TAW5404	Specific training II (Weaving)	TAW5004	Specific training II (Weaving)
TAW5405	Specific training II (Chemical processing)	TAW5005	Specific training II (Chemical processing)
TAW5406	Specific training II (Knitting)	TAW5006	Specific training II (Knitting)

**Excluded Combinations**

TAX3458 and TAX3530	TAI4371 and TAI5552
TAX3370 and TAX5551	TAI4472 and TAI5552
TAX4361 and TAX4441	TAX4571 and TAX5551

**Exemptions applicable for Industrial Studies Study Programme****Qualifications in English Language**

<b>Qualification</b>	<b>Course exempted</b>
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 Higher Diploma or Honours degree in Industrial Studies – Apparel Production and Management, Textile Manufacture and Fashion Design and Product Development]

<b>Qualification</b>	<b>Courses exempted</b>		
	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, Ratmalana	TAX3458 TAX3530 TAX3331 TAX3459 [TAX3370 and TAX4571] or TAX5551	TAX4560	
Certificate in Fabric Technology (Part time) from the Textile Training and Services Centre, Ratmalana	TAX3530		
Certificate in Textile Dyeing and Printing (Part time) from the Textile Training and Services Centre, Ratmalana	[TAX3370 and TAX4571] or TAX5551		
Diploma in Textile Technology from the Textile Training and Services Centre, Ratmalana	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, Ratmalana	TAX3458 {TAX3370 and TAX4571} or TAX5551		
Diploma in Clothing Technology, Clothing Industry Training Institute, Ratmalana	TAX3530 TAI3533 TAI3332 TAX3331	TAX4438 TAW4401 TAX4539	TAW5401
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	TAX3530 TAX3331 TAI3332 TAI3533 TAM3234 TAM3535 TAZ3536	TAX4438 TAW4401 TAX4539 TAX4540 TAI4442	TAX5648
Diploma in Textile and Apparel Technology (Full time) , Sri Lanka Institute of Textile and Apparel (SLITA), Ratmalana -(Only for the Apparel Production and Management and Fashion Design & Product Development streams)	TAX3530 TAX3331 TAI3332 TAI3533 TAM3234 TAM3535 TAZ3536	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), Ratmalana - (Only for Apparel production and management stream)	TAX3530 TAI3332 TAZ3536	TAX4539 TAX4438	
Diploma in Textile and Apparel Technology (Full time), Sri Lanka Institute of Textile and Apparel (SLITA), Ratmalana - (Only for Textile manufacture stream)	TAX3458 TAM3234 TAX3331 TAM3535 TAX3459 TAZ3536 TAX3370	TTX4539	TAX5648
Diploma in Textile and Apparel Technology (Full time after 2015), Sri Lanka Institute of Textile and Apparel (SLITA), Ratmalana - (Only for Textile manufacture stream)	TAX3458 TAX3459 TAX3370 TAZ3536	TAX4539 TAX4571 TAX4560 TAX4361	
Diploma in Textile and Apparel Technology (Part time) , Sri Lanka Institute of Textile and Apparel (SLITA), Rathmalana	TAX3530		TAX5551
Diploma in Lanka Institute of Fashion Technology (LIFT) – (Only for the Fashion Design and Product Development Stream)	TAI3270	TAI4474 TAI4473 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) – New Curriculum(after 2007)	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) – New Curriculum(after 2007) 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]
Licentiate 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	TAZ3536		
Paper 11 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 TAX4571] or TAX5551		
TTI3650 Pattern Making	TAI3533		
Diploma in Technology (Textile Engineering) from the OUSL	TAX3459    TAX3458 TAX3530	TAX4539 TAX4560	TAX5551

**Qualifications in Agriculture and related disciplines**

[Applicable for Higher Diploma or Honours degree in Industrial Studies Agriculture 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
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
Diploma in Animal Husbandry, Sri Lanka, School of Animal Husbandry, Department of Animal Production and Health, Welisara		AGI4460	AGI5471
NDT (Agriculture) - without training	Exemptions granted for NDT (Agriculture) except AGW4401 & AGW5401		

# **Bachelor of Software Engineering Honours 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 of 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 software and aligned industries, that will disseminate essential knowledge and skills in the field of software engineering and 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 software engineers;

- With up-to-date knowledge and expertise, and acquired ingenuity to address software engineering problems with holistic approach with due consideration to environment and society.
- With inspiration to be leaders in the advancement of their specialty areas by engaging in continuous professional development and research.

### 3.3 Bachelor of Software Engineering Honours Study Programme

The Bachelor of Software Engineering Honours Degree has been designed carefully according to the requirements of IEEE/ACM guideline and conforms to the requirements of Sri Lanka Quality Framework (SLQF).

A student could obtain a Higher Diploma in Software Engineering after successful completion of a required combination of courses.

#### Duration

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

#### Medium of instruction

Medium of instruction is English.

#### Eligibility for Admission to the Programme of Study

A person seeking admission to the programme leading to the award of the Degree of Bachelor of Software Engineering Honours shall be required to possess one of the following qualifications and **pass the selection test** conducted by the Open University of Sri Lanka.

- Obtained three passes in General Certificate of Education (Advanced Level) in any stream, excluding General English and General Information Technology subjects or

- Obtained “C” passes in any 3 subjects in Cambridge/Edexcel Advanced Level examination or
- Passes in any three foundation subjects of OUSL or
- Any other 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 Software Engineering Honours, S/he has to meet the following requirements within a maximum period of 12 academic years.

1. Obtain passes for all compulsory courses, and
2. Fulfil the Level-wise and Category-wise minimum Credits for the Degree as given in Table 5.

#### Requirements for the award of the Higher Diploma

In order for a student to qualify for the award of the Degree of Bachelor of Software Engineering Honours, he has to meet the following requirements within a maximum period of 12 academic years.

1. Obtain passes for all compulsory courses of levels 3 and 4 for the specialization, and
2. Fulfil Level-wise and Category-wise minimum Credits for the Higher Diploma as given in Table 6



**Table 5 - Course credits requirements for the Award of the Bachelor of Software Engineering Honours Degree**

Category	Minimum credits	Maximum credits
Industrial (I)	65 subject to a minimum of 30 credits being at levels 5 and 6, of which minimum of 15 credits at level 6	80 subject to a minimum of 30 credits being at levels 5 and 6, of which minimum of 15 credits at level 6
Engineering (X)		
Management (M)	17, subject to a minimum of 12 at levels 5 or above	30, subject to a minimum of 12 at levels 5 or above
General (J)	5	20
Mathematics (Z)	12, subject to a minimum of 3 at levels 5 or above	21, subject to a minimum of 3 at levels 5 or above
Project (Y)	8 subject to a minimum of 6 credits being at level 6	12 subject to a minimum of 6 credits being at level 6
Language (L)	0	4
Industrial Training (W)	8	8
Total	130 subject to a minimum of 60 credits being at levels 5 and 6, of which at least 30 credits at level 6.	

**Table 6 - Course credits requirements for the Award of the Higher Diploma in Software Engineering**

Category	Minimum credits	Maximum credits
Industrial (I)	30 at levels 3 and 4, of which minimum of 15 credits at level 4	44 subject to a minimum of 30 credits being at levels 3 and 4, of which minimum of 15 credits at level 4
Engineering (X)		
Management (M)	5, at levels 3 or 4	10, subject to minimum 5 at levels 3 or 4
General (J)	2	9
Mathematics (Z)	9, at levels 3 or 4	12, at levels 3 or 4
Project* (Y)	5	9
Industrial Training* (W)		
Language	0	4
Total	65, subjected to a minimum of 30 at level 4	

### Grade Point Average (GPA)

The GPA shall be computed by considering the courses at levels 4, 5, and 6 totalling to 70 credits. In selecting the courses for 70 credits the following sequence will be followed.

- (1) Compulsory courses at levels 5 and 6
- (2) Non-compulsory courses at levels 5 and 6
- (3) Compulsory courses at level 4

$$GPA = \frac{\{\sum(Credit\ Rating\ of\ the\ Course) * (GPV)\} + (Part\ Credit\ of\ the\ Course) * (GPV)}{70}$$

In a situation, where exactly seventy (70) credits cannot be obtained, the courses are selected to the nearest value below seventy (70), and the remainder credit is taken as a Part Credit of the next course.

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

### 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
- Levels 5 and 6 (considering all Categories): 30
- Levels 5 and 6 (considering X, I, Z and Y Categories): 20
- 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 the award of the Higher Diploma are as given below.

- Level 4 (considering all Categories): 15
- Level 4 (considering X and I Categories): 8
- Levels 3 and 4 (considering X, I and Z Categories): 20

- Total (considering all Categories and all levels from 3 to 6): 33

A list of qualifications for which exemptions could be claimed is given in Page 72.

### Curriculum

The curriculum of the Programme of Study leading to the awards of Bachelor of Software Engineering Honours degree and the Higher Diploma has been revised to comply with the Sri Lanka Qualification Framework and to meet the professional accreditation requirements, and named as the Revised Curriculum. The students who have enrolled the study programme up to the academic year 2017/18 are following the previous curriculum and named as Interim Curriculum. This Section gives the combination of courses for the Bachelor of Software Engineering Honours Degree.

From the academic year 2019/20, only levels 3 and 4 courses are available from the Revised Curriculum and levels 5 and 6 courses will be available from the academic year 2019/20. The students enter the programme with prior qualifications (lateral entry) having obtained exemptions from the lower level courses may have to register for equivalent courses of the Interim Curriculum in 2019/20. Such equivalent courses have been listed alongside the courses of the Revised Curriculum where applicable.

## Curriculum for Software Engineering Specialization

### Levels 3 and 4 compulsory courses

Course (Revised Curriculum)	Prerequisites
<b>Level 3</b>	
AGM3203 Communication Skills	None
EEI3346 Web Application Development	EEI3266(CR)
EEI3262 Introduction to Object Oriented Programming	EEX3467(CR)
EEI3266 Information Systems and Data Management	None
EEX3373 Communication and Computer Technology	AGM3203 (CR), EEX3467(CR)
EEX3467 Software Engineering Concepts and Programming	None
EEZ3461 Basic Mathematics for Computing	None
<b>Level 4</b>	
AGM4307 Economics and Marketing for Engineers	Pass in 18 credits in Level 3
EEI4267 Requirement Engineering	EEX3467(P)
EEI4346 Web Technology	EEI3346(CR)
EEI4361 User Experience Engineering	EEX3467(EL), Pass in 15 credits
EEI4362 Object Oriented Design	EEI3262(CA), EEX3467(CA), Pass in 15 credits
EEI4366 Data Modelling and Database Systems	EEI3266(CA), Pass in 15 credits
EEX4465 Data Structures and Algorithms	EEX3373(CA), MHZ4256(CR), Pass in 15 credits
EEY4189 Software Design in Group	EEX3467(P), {EEI3262(CA) or EEI3269(CA)}, Pass in 26 credits from level 3
EEZ4361 Probability & Statistics	Pass in 15 credits
MHZ4256 Mathematics for Computing	None

### Levels 3 and 4 Elective Courses

Course (Revised Curriculum)	Prerequisites
EEI3269 Introduction to Mobile Application Development	None
EEI3668 Graphic and Interactive Multimedia design	None
EEI3372 Programming in Python	None
EEM3366 Introduction to Business Studies	None
LLJ3245 Introduction to Laws of Sri Lanka	None
MHJ4241 History of Technology	Pass in 20 credits
EEX4373 Data Science	EEI4366(CR), Pass in 30 credits from level 3
EEI4369 Mobile Application Development for Android	EEI3269(CR)
EEY4489 Higher Diploma Project – Software Engineering	Pass in 45 credits

### Levels 5 and 6 Compulsory Courses

These courses are not available in the academic year 2019/20. The students may register for alternative courses (if available) given in the Table of Alternative Courses for the academic Year 2019/20 with the same pre-requisites.

Course (Revised Curriculum)	Prerequisites
CVM5401 Accounting for Engineers	AGM4307(P)
EEI5467 Software Testing and Quality Assurance	EEX3467(P), 30 credits pass
EEX5270 Information Security	EEX3467(P), EEX4465(P), pass in 30 credits
EEX5364 Performance Modelling*	Pass in 40 credits, EEI3346(P), EEZ4361(P)
EEX5563 Computer Architecture and Operating Systems	EEX3373(P) , Pass in 36 credits
EEW5811 Industrial Training – Software	EEX3467(P), EEI4362(P), EEX4465(P), Pass in 40 credits
MHZ5355 Discrete Mathematics	MHZ3551(P) or [MHZ4256(CA), EEZ3461(P)]
MHJ5342 Technology, Society and Environment	Pass in 45 credits
DMM6601 Management for Engineers	CVM5401(CA), pass in 60 credits
EEI6360 Software Project Management	Pass in 60 credits
EEI6171 Emerging Technologies	Pass in 60 credits
EEI6567 Software Architecture and Design	EEX3467(P), EEI4362(P)
EEM6201 Professional Practice	Pass in 30 credits in level 3, Pass in 24 credits at level 4 or above
EEX6363 Compiler Construction	EEX4465(P), MHZ5355 (P), pass in 60 credits
EEY6189 Research Methodology and Project Identification	Pass in 60 credits
EEY6689 Final Project – Software Engineering	EEI6360(CR), EEI6567(CR), Pass in 75 credits

### Levels 5 and 6 Elective Courses

Course (Revised Curriculum)	Prerequisites
EEX5376 Embedded Systems and Internet of Things	EEI3266(P), EEI3372(P), AGM3203(P), EEX3373(P)
EEX5280 Creative Design	Pass in 45 credits
EEI5466 Advanced Database Systems	EEI3266(P), AGM3203(CR)
EEX6340 AI Techniques and Agent Technology	EEX4465(P), EEX3467(P), MHZ5355(P)
EEX6377 Principles and Applications of Data Mining	EEX4465(P), EEZ4361(P), EEI4366(P), Pass in 45 credits
EEX6278 Neural Networks and Fuzzy Logic Applications	EEX3467(P), Pass in 65 credits

**Alternatives Courses for the academic year 2019/20**

<b>Course (Revised Curriculum)</b>		<b>Alternative Course to offer in 2019/20</b>	
CVM5401	Accounting for Engineers	None	
EEI5467	Software Testing and Quality Assurance	EEI5567	Software quality assurance and testing
EEX5270	Information Security	None	
EEX5364	Performance Modelling	None	
EEX5563	Computer Architecture and Operating Systems	EEX5563	Computer organization and operating systems
MHZ5355	Discrete Mathematics	MHZ5360	Discrete Mathematics II
MHJ5342	Technology, Society and Environment	MHJ5563	Technology, Society and Environment
DMM6601	Management for Engineers	EEM5860	Management and Professional Issues
EEI6360	Software Project Management	EEI6560	Software project management
EEI6171	Emerging Technologies	None	
EEI6567	Software Architecture and Design	EEI6567	Software architecture and design
EEM6201	Professional Practice	None	
EEX6363	Compiler Construction	EEX6563	Software construction
EEY6189	Research Methodology and Project Identification	None	
EEY6689	Final Project – Software Engineering	EEY6A89	Group Project (Software Engineering)
EEX5376	Embedded Systems and Internet of Things	None	
EEX5280	Creative Design	None	
EEI5466	Advanced Database Systems	EEI5566	Advanced Database Systems
EEX6340	AI Techniques and Agent Technology	EEI6565	AI techniques
EEX6377	Principles and Applications of Data Mining	None	
EEX6278	Neural Networks and Fuzzy Logic Applications	None	

**Exemptions applicable for Bachelor of Software Engineering Study Programme****Qualifications in English Language**

Qualification	Course exempted
G C E (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

**The recommended exemptions are granted to the students who have satisfied the admission requirement to the Programme of Study.**

Qualification	Courses Exempted
Diploma in Technology (OUSL) Civil, Textile, Agriculture	VTI3F00,EEZ3461
Diploma in Technology (OUSL) Electrical, Electronics, Mechanical, Mechatronics	VTI3F00, EEZ3461,EEX3373
Diploma in Technology (OUSL) Computer	VTI3F00, EEZ3461, EEX3373, EEX3467, EEX4465
BSc/BA or equivalent University degree (except specialization in Computing)	VTI3G00
BCS (British Computer Society) Certificate	VTI3F00, EEX3467, EEX4465
SLIIT (SL Institute of Information Technology) Associate Diploma in IT	VTI3F00, EEX3373, EEI3346, EEI3266
SLIIT (SL Institute of Information Technology) Diploma in IT	VTI3F00, EEX3373, EEI3346, EEI3266, EEX4465, EEX3467
CMA (Certified Management Accountants)– Stage I or II	VTI3G00
CIMA (Chartered Institute of Management Accountants) - Stage I or II	VTI3G00
IBSL (Institute of Bankers of Sri Lanka) Certificate or Advance Certificate in Banking and Finance	VTI3G00
NIBM (National Institute of Business Management) Diploma in Computer System Design (DCSD) (from 2010)	VTI3F00, EEI3346, EEI3266, EEI3262, EEX3373, EEX3467, EEI4362
NIBM (National Institute of Business Management) Higher Diploma in Computer Based Information Systems (HDCBIS) (from 2010)	EEI3269, EEI4346, ECI4366, EEX4465, EEI4369, EEY4189, VTI3F00
NDT(National Diploma in Technology) Electronic & Telecom or NDES(National Diploma in Engineering Sciences) (Old curriculum)	VTI3G00, EEZ3461, EEX3373
Completion of first and second year of NDT in any field	VTI3G00, EEZ3461
NDES (Old curriculum) in any field	VTI3G00, EEZ3461,
NDES (New curriculum) in any field except (Electronics, Power or Telecommunication)	VTI3G00, EEZ3461

<b>Qualification</b>	<b>Courses Exempted</b>
NDES (Electronics, Power or Telecommunication)(New curriculum)	VTG00, EEZ3461, EEX3373
Completion of 1 <sup>st</sup> and 2 <sup>nd</sup> phases of NDES (New curriculum) 2003 Power, Electronics or Telecommunication	VTI3G00, EEZ3461
NDET (National Diploma in Engineering Technology) (Electrical/Electronic)	VTI3G00, EEX3373
HNDE (Higher National Diploma in Engineering) (Electrical Power/Electronics)	VTI3G00,EEZ3461, EEX3373
NDICT (National Diploma in Information and Communication Technology)	VTI3F00,EEX3373
Diploma in System Design and Programming, Vocational Training Authority (VTA)	VTI3F00, EEX3373
HNDIT(Higher National Diploma in IT) Semester II	EEX3467, EEX4465, VTI3C01
HNDIT(Higher National Diploma in IT) Semester III	EEI3266, EEI4366, VTI4C00
HNDIT(Higher National Diploma in IT) , IT2004 Introduction to Communication and Computer Networks and IT 4103 Web programming	EEI3346, EEX3373
Higher National Diploma in Information Technology (HND IT), SLIATE, mathematics for Computing &GCE A/L combine mathematics – (New syllabus from 2010)	EEZ3461
HNDIT(Higher National Diploma in IT) Semester III with IT 3103 Object Oriented Analysis and Design	EEI3262, EEI4362
HNDIT(Higher National Diploma in IT), IT4301 Software Testing and IT4303 Software Quality Management	EEI5467
BIT – Bachelor in Information Technology (University of Colombo) 1 <sup>st</sup> year – Diploma in IT	VTI3F00, EEX3373, EEI3266
BIT – Bachelor in Information Technology (University of Colombo) 3 <sup>rd</sup> Semester	EEX3467
BIT – Bachelor in Information Technology (University of Colombo) 2 <sup>nd</sup> year – Higher Diploma in IT	EEI4366, EEX4465
BIT - Bachelor in Information Technology (University of Colombo)	EEZ3461, MHZ4256
BIT - Bachelor in Information Technology (University of Colombo) IT3503 - Web Development Techniques and IT4503 - Data Communications & Networks	EEI3346, EEI4346
ACS (Australian Computer Society) Diploma in IT (New syllabus from 2006)	VTI3F00, EEX3467
ACS (Australian Computer Society) Diploma in IT (Old syllabus)	VTI3G00
OUSL Faculty of Engineering Technology MPZ3230 or MPZ3231 or MHZ3531	EEZ3461

<b>Qualification</b>	<b>Courses Exempted</b>
OUSL Faculty of Engineering Technology MHZ3531 or EEZ3561	EEZ3461
OUSL Faculty of Engineering Technology EEX3465 or EEX3467 (DIST)	EEX3467
OUSL Faculty of Engineering Technology EEI3364 or EEI3346 (DIST)	EEI3346
OUSL Faculty of Engineering Technology EEX3262 or EEI3262 (DIST)	EEI3262
OUSL Faculty of Engineering Technology EEI3566 or EEI3266 (DIST)	EEI3266
OUSL Faculty of Engineering Technology EEI3368 or EEI3668 (DIST)	EEI3668
OUSL Faculty of Engineering Technology EEI3369 or EEI3269 (DIST)	EEI3269
OUSL Faculty of Engineering Technology EEM3466 or EEM3366 (DIST)	EEM3366
OUSL Faculty of Engineering Technology MPZ4230 or MHZ4530	EEZ4361
OUSL Faculty of Engineering Technology ECX3233 or EEX3533 or EEX3336	EEX3373
OUSL Faculty of Engineering Technology ECX4235 or EEX4535	EEX4465
OUSL Faculty of Engineering Technology ECX4237 or ECX4247 or EEX4547 or ECX3217 or EEX3517 or EEX3417	EEX3467
OUSL Faculty of Engineering Technology ECX5236 and ECX5235	EEX5563
AAT- Association of Accounting Technicians (Sri Lanka) - Stage II or III	VTI3G00



## **Diploma in Information Systems and Technology Study Programme**

### 3. 4 Diploma in Information Systems and Technology Study Programme

The Diploma in Information Systems and Technology programme of the OUSL has been carefully designed in accordance to the requirements of the Sri Lanka Quality Framework (SLQF). The programme is designed in a way that a student who successfully completes the Diploma can find a placement immediately in the IT industry and earn the Bachelor of Software Engineering Honours Degree while being employed.

A student may obtain the Diploma after successfully completion of a required combination of courses and credit requirements as given in the Table 8.

#### Duration

The minimum duration of the Diploma programme is one (1) year and the maximum number of years a student can spend to complete the diploma programme is three (03).

#### Medium of instruction

Medium of Instruction is English.

#### Eligibility for Admission to the Programme of Study

A person seeking admission to the Diploma in Information Systems and Technology programme shall be required to have fulfilled the requirement listed below.

- A minimum of three passes from the General Certificate of Education (Advanced Level) Examination, Sri Lanka or,
- Obtained, by virtue of qualifications given in the Table 7 a minimum total of 30 credits or,
- Secured an equivalent or higher qualification acceptable to the Senate and
- A Pass grade in the prescribed selection test when applicable.

Note: The faculty may decide to withhold the selection test after evaluating the received applications for the programme

**Table 7-Recognized qualifications to claim credits to fulfil the admission requirements**

Qualification		Equivalent Credits
OUSL	Foundation courses	30
G.C.E. (A/L) Sri Lanka	Pass in any subject in the G.C.E.(A/L) Sri Lanka (except General English or General IT (GIT))	10 per subject up to a maximum of 30
G.C.E. (A/L) London	G.C.E.(A/L) London or G.C.E. (A/L) EdExcel or G.C.E. (A/L) Cambridge Examinations	10 per subject up to a maximum of 30
SLIIT	SLIIT Certificate in IT	30
BCS	BCS (British Computer Society) Certificate	30
UCSC	UCSC Successful completion of Semester 1 examinations	30
CMA	Certified Management Accountants – Stage I	30
CIMA	Chartered Institute of Management Accountants – Stage I	30
IBSL	Institute of Bankers of Sri Lanka Certificate in Banking and Finance	30
AAT	Association of Accounting Technicians – Stage I	15
	Association of Accounting Technicians – Stage II	15

### Requirements for the award of the Diploma

In order for a student to qualify for the award of the Diploma in Information Systems and Technology, S/he has to meet the following requirements within a maximum period of 3

academic years.

- (1) Obtain passes for all compulsory courses
- (2) Fulfil Category-wise minimum Credits for Diploma as given in Table 8

**Table 8 - Course credits requirements for the award of Diploma in Information Systems and Technology**

Category	Minimum credits	Maximum credits
Industrial (I)	18	25
Engineering (X)		
Management (M)	0	5
General (J)	0	3
Mathematics (Z)	5	8
Project (Y)	0	7
Training/Practice (W)	0	3
Computer literacy (K)	0	5
Total	30	

### Limits for Exemptions

The Senate may grant exemptions to a student, either from specified courses (specific credit exemptions) or from the requirement of obtaining a specified number of credits in given categories at given levels (general credit exemptions) towards the award in recognition of previously obtained qualifications and experience or other achievement.

A list of qualifications for which exemptions could be claimed is given in Page 78.

Notwithstanding any exemptions so granted, a student shall acquire, by successful completion in accordance with the Scheme of Assessment, 15 credits, of which at least 13 credits from the categories of Industrial, Engineering and Mathematics course categories.

### Curriculum

The curriculum consists of 12 credits of compulsory courses and elective course.

## Curriculum for the Diploma of Information Systems and Technology

### Compulsory Courses

Course	Prerequisites
EEX3363 Introduction to Computing	None
EEX3465 Fundamentals of Programming	None
EEZ3562 Mathematics	None

### Elective Courses

Course	Prerequisites
EEI3262 Introduction to Object Oriented Programming	None
EEI3266 Information Systems and Data Management	None
EEI3269 Introduction to Mobile Application Development	None
EEI3346 Web Application Development	None
EEI3372 Programming using Python	None
EEI3668 Graphics and Multimedia Design	None
EEI4346 Web Technology	EEI3346 (CR)
EEI4369 Introduction to Android	EEI3269(CR)
EEM3366 Introduction to Business Studies	None

### Exemptions applicable for Diploma in Information Systems and Technology study programme

	Qualification	Courses exempted
OUSL Faculty of Engineering Technology Individual Courses	OUSL Faculty of Engineering Technology MPZ3230/MHZ3531	EEZ3562
	OUSL Faculty of Engineering Technology EEX3533 or ECX3233	EEX3363
BCS	BCS (British Computer Society) Certificate	EEX3363
	BCS (British Computer Society) Diploma	EEX3363, EEI3262
SLIIT	SLIIT Certificate in IT	EEX3363
	SLIIT Associate Diploma in IT	EEX3363, EEZ3562
BIT	Bachelor of Information Technology (BIT) Colombo – 1 <sup>st</sup> Semester	EEX3363
BIT Individual Subjects	BIT – IT3505 Web development Techniques and IT4503 – Data Communication and Networks	EEI3346
NDT	NDT Electronic & telecom or NDES (Old curriculum)	EEZ3562, EEX3363
NDES	NDES (Electronics), NDES (power) or NDES (Telecommunication) (New curriculum)	EEX3363, EEZ3562
HNDE	Higher National Diploma in Engineering (HNDE) (Electrical Power/Electronics)	EEX3363, EEZ3562

**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.

#### 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 81.

#### Curriculum

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

**Table 9 – Courses for Advanced Certificate in Apparel Technology**

Course		Pre-requisites
<b>Level 2</b>		
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, you can contact programme coordinator Mr. L S A Perera (0112881310).*

### Exemptions applicable for Advanced Certificate in Apparel Technology Study Programme

Qualification	Courses 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 is needed)	VTL2001
G.C.E.(A/L) Sri Lanka – Combined mathematics and GCE(O/L) Sri Lanka- Science & Technology or G.C.E.(A/L) Sri Lanka – Physics and GCE(O/L) Sri Lanka – Mathematics or G.C.E.(A/L) Sri Lanka – Pure mathematics and GCE(A/L) Sri Lanka – Applied mathematics and GCE(O/L) Sri Lanka – Science & technology	TAZ2587
Certificate in Fabric Technology (Part time) from the Textile Training and Services Centre, Ratmalana	TAI2585
Certificate in Garment Production Management (Part time) from Clothing Industry Training Institute, Ratmalana	TAI2886
Certificate in Garment Industry Management, Garment Industry Management Institute	TAI2886
Licentiatehip of Textile Institute (LTI) Examination /Associateship of Textile Institutes (ATI) Technology Group Examination Paper 1 in LTI /Paper 1 (e) in ATI – Textile Technology	TAI2585
Paper 11 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. You can register for these courses (maximum of 18 credits) without registering for a particular study programme.

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.

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

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 to be offered shortly are:

Master of Energy Management – One year programme

Master of Science in Industrial Engineering – Two year Programme

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: Application for Evaluation of Qualifications for Exemptions**

### **The Open University of Sri Lanka- Faculty of Engineering Technology Application for Evaluation of Qualifications for Exemptions**

Only those who possess qualifications NOT listed in the Student Guidebook 2019/20 need to apply.

#### **IMPORTANT**

Please note that only full qualifications are considered and part qualifications will not be accepted. You are advised to check your qualifications with relevant departments and apply only if necessary.

#### **The following documents must be attached to the Application Form:**

- (a) Certified copies of all Educational/Professional Qualifications
- (b) Certified copies of the Syllabi of each subject of the course/programme to be evaluated
- (c) Certified copies of past papers of each subject of the course /programme to be evaluated
- (d) Hand book (Student Guidebook) of the Institution from which each qualification has been obtained

Note: Please note that applicant should provide certified English translations if the originals are in any other language.

The completed application form with relevant documents must be submitted to the Dean, Faculty of Engineering Technology, The Open University of Sri Lanka, Nawala, Nugegoda as early as possible. **Applications received after March 20, 2019 will not be processed.**

#### **INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED**

If you apply for Evaluation of Qualifications, please remember to ask at the registration counter whether you have been granted additional exemptions, when you come for the registration.

Note: The exemption form can be downloaded from the faculty webpage:

<http://www.ou.ac.lk/home/index.php/ousl/faculties-institutes/engineering-technology>



# Application for Evaluation of Qualifications for Exemptions Academic Year 2018/2019

## Part A

Student's Personal Information:

1. Name of Student with initials:
2. Full Name:
3. Home Address:
4. Telephone:                      Home:                                      Mobile:
5. Email address:
6. Have you checked whether your qualifications are already listed in the Student Guidebook 2019/20?    Yes/No

## Part B

**1. Please tick the programme/field you hope to request exemptions at OUSL**

Bachelor of Technology 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	
Diploma in Information System s & Technology	Information System s & Technology	

## 2. Entry qualification

G.C.E. (A/L) Examination Results

G.C.E. (A/L) <i>Tick the relevant</i>		Subject	Grade	Other Subjects	Grade
		Mathematics			
Local		Physics			
Cambridge		Chemistry			
Edexcel		English			

## 3. Any other qualification (please specify)

--

## 4. Qualifications received from the Open University of Sri Lanka (OUSL) and the OUSL courses successfully completed, if any.

OUSL Course		Courses from which exemptions are requested	
Course Code	Course Title	Course Code	Course title

## Part C

Provide the particulars of the Qualification you have already gained and that need to be evaluated:  
(If you possess more than one qualification to be evaluated, please include additional copies of Part C & Part D of this form together with relevant documents)

Title of the Course/Programme	
Title of the award (i.e. Qualification)	
Name & Address of the Institution which awarded the above mentioned qualification	
Duration of the Course/Programme	
Year of the award	
Is it Full time/ Part time?	
Entry requirements to follow the course/programme	

## Part D

Details of courses/programme mentioned in Part C

### 1. Number of hours spent on each subject (Use separate sheet if necessary)

Subject/Course	Year	Time spent (Hours)			
		Lectures	Tutorials	Lab Work	Training

### 2. Provide the Laboratory experiments done in each subject to be evaluated (Use separate sheet if necessary)

--

Signature of Applicant

Date

For Office Use Only

Exemptions Granted for the Applicant:

Department	Qualifications considered	Exemptions Granted (State if common for all)	Signature of the Head of the Department	Date

## **Annex 2: 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**

- 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**

- 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 “Grama sevaka” to certify the annual parental income.
- g) No disciplinary action should have been taken against the student.

### Annex 3: Conversion of Courses

Courses of Bachelor of Technology Honours in Engineering Study Programme  
Courses offered by the Department of Civil Engineering

Alternative Course		Course of the Revised Curriculum	
CVX3531	Structural Analysis & Design I	CVX3441	Structural Analysis & Design I
CVX3532	Hydraulics & Hydrology	CVX3340	Introduction to Hydraulics & Hydrology
CVX3533	Surveying I	CVX4342	Surveying I
CVX3534	Strength of Materials	CVX3442	Strength of Materials
CVX4530	Soil mechanics & Introduction to Rock Mechanics	CVX4343	Soil Mechanics
CVX4531	Structural Analysis & Design II	CVX4445	Structural Analysis and Design II
CVX3530	Construction Materials	CVX4446	Construction Engineering & Materials
CVX4532	Construction Engineering & Planning		
CVX4533	Irrigation Engineering	CVX4347	Irrigation Engineering
CVX4534	Water Supply and Sewerage Engineering	CVX4348	Water and Wastewater Engineering
CVX4535	Building Engineering	CVX4349	Building Engineering
CVX4536	Highway Engineering	None	
CVX4538	Quantity Surveying	CVX4350	Quantity Surveying
CVX5530	Surveying II	CVX5440	Surveying II
CVX5531	Mechanics of Fluids	CVX4240	Hydraulic Engineering I
		CVX4241	Engineering Hydrology
		CVX5241	Hydraulic Engineering II
		CVX5242	Mechanics of Fluids
CVX5532	Engineering Geology	CVX4344	Engineering Geology
CVX5533	Structural Analysis	CVX5443	Structural Analysis
CVX6530	Geotechnics	CVX6444	Geotechnics
		CVX7241	Geotechnical Design
CVX6831	Construction Engineering & Management	CVX6546	Construction Engineering & Management
CVX6832	Structural Design	CVX7640	Structural Design
CVX6533	Environmental Engineering	CVX6345	Environmental Engineering
CVY6D95	Individual Project – Type B (Civil)	CVY7880	Engineering Research Project (Civil)
CVY6A96	Group Project (Civil)	CVY7880	Engineering Research Project (Civil)
CVY6397	Project Identification & literature survey	CVX6180	Research Methodology and Project Identification (Civil)
CVY6A98	Individual Project – Type A (Civil)	CVY7880	Engineering Research Project (Civil)
CVW4002	Industrial Training (Civil-diploma)	CVW4802	Industrial Training (Civil-diploma)
CVW5003	Industrial Training (Civil-undergraduate)	CVW6803	Industrial Training (Civil-undergraduate)

## Courses offered by the Department of Electrical and Computer Engineering

Alternative Course	Course of the Revised Curriculum
EEX3350 Electronics I	EEX3351 Electronics I
EEX3510 Electro Techniques	EEX3410 Introduction to Electrical Engineering
EEX3517 Software Development for Engineers	EEX3417 Software Development for Engineers
EEX3533 Communication & IT	EEX3336 Communications and Computer Technology
EEX3531 Electrical Circuits & Measurements	EEX3331 Electrical measurements and instrumentation
	EEX4331 Circuit Theory and Design
EEX3532 Electrical Power	EEX4332 Electrical Power
EEX4530 Fault Diagnosis in Electronic Circuits	None
EEX4350 Electronics II	EEX4351 Electronics II
EEX4533 Communication	EEX4330 Communications
EEX4534 Electrical Installations	EEX4434 Electrical Installations
EEX4535 Data Structures and Algorithms	EEX4435 Data Structures and Algorithms
EEX4536 Microprocessors and Interfacing	EEX4436 Microprocessors and Interfacing
EEX4547 Software Engineering	EEX4347 Software Engineering
	EEX3417 Software Development for Engineers
EEX4548 Electrical Machines	EEX4448 Electrical Machines
EEX4552 Power Systems I	EEX4542 Power Systems I
EEX4562 Object Oriented Design and Programming	EEX4362 Object Oriented Design and Programming
EEX5531 Network theory	EEX7231 Advanced circuit design and analysis
EEX5533 Communication Theory & Systems	EEX5333 Communication Theory & Systems
EEX5534 Data Communications	EEX5434 Data Communications & Networking
EEX5535 Operating systems	EEX5335 Operating Systems
EEX5536 Computer Architecture	EEX5536 Computer Architecture
EEX5538 High voltage engineering and electrical machines	EEX5338 High voltage engineering
EEX5543 Physical & Opto Electronics	EEX6253 Physical & Opto Electronics
EEX5545 Database management systems	EEX3266 Information Systems and Data Management
	EEX4366 Data Modelling and Database Systems
EEX5547 Group work in software development	EEX4181 Group Project (Computer Engineering)
EEX5832 Power Systems II	EEX5352 Power Systems II
EEX5567 Software Testing and Quality Assurance	EEX5467 Software Testing and Quality Assurance
EEX6351 Digital Electronic systems	EEX5351 Digital Electronic Systems
EEX6534 Digital Signal Processing	EEX7434 Digital Signal Processing
EEX6535 Compiler Design	EEX6335 Compiler Design
EEX6536 Processor design	EEX7436 Processor Design
EEX6539 Wireless Communication	EEX6339 Wireless Communication



<b>Alternative Course</b>	<b>Course of the Revised Curriculum</b>
EEX6540 Knowledge engineering	EEX7340 AI Techniques & Agent Technology
	EEX7241 Neural Networks & Fuzzy Logic Applications
EEX6541 Field Theory	EEX6441 Electromagnetism & Wave Propagation
EEX6542 Modern Control Systems	EEX7342 Advanced Control Engineering
EEX6550 Analog Electronic Systems	EEX6450 Analog Electronic Systems & Instrumentation
EEX6543 Microwave Engineering & Applications	EEX7333 Microwave Devices & Antennas
EEX6832 Power systems planning	EEX7432 Power systems planning operations and control
EEY6D95 Individual project – Type B (Computer, Electrical, Electronic and Communication)	EEY7881 Engineering Research Project (Computer Engineering) or
	EEY7882 Engineering Research Project (Electrical Engineering) or
	EEY7883 Engineering Research Project (Electronics & Communication Engineering)
EEY6A96 Group project (Computer, Electrical, Electronic and Communication)	EEY7881 Engineering Research Project (Computer Engineering) or
	EEY7882 Engineering Research Project (Electrical Engineering) or
	EEY7883 Engineering Research Project (Electronics & Communication Engineering)
EEW3001 Industrial Training I (Electronics)	EEW4301 Industrial Training I (Electronics) or EEW4403 Industrial Training I (Electronics & Communications)
EEW4001 Industrial Training II (Software)	EEW5501 Industrial Training (Computer)
EEW4002 Industrial Training II (Power)	EEW4502 Industrial Training II (Electrical Power)
EEW4003 Industrial Training II (Communication)	EEW5403 Industrial Training II (Electronics & Communications)
EEW5001 Industrial Training II (Software-undergraduate)	EEW5501 Industrial Training (Computer)
EEW5002 Industrial Training II (Power-undergraduate)	EEW6502 Industrial Training II (Electrical Power-undergraduate)
EEW5003 Industrial Training II (Communication- undergraduate)	EEW5403 Industrial Training II (Electronics & Communications)

#### Courses offered by the Department of Mechanical Engineering

<b>Alternative Course</b>	<b>Course of the Revised Curriculum</b>
DMX3511 Communicating Engineering Information	DMX3305 Engineering Design Graphics
	AGM3203 Communication Skills
DMK3589 Computer Aided Drafting	None
DMX3512 Basic Thermo-Fluids	DMX3401 Fluid Mechanics and Thermodynamics
DMX3533 Workshop Technology	DMX3206 Introduction to Manufacturing processes
	DMX3203 Introduction to Engineering Materials

Alternative Course		Course of the Revised Curriculum	
DMX3534	Engineering Drawing	DMX4201	Advanced Engineering Design Graphics
DMX3535	Thermo-Fluids	DMX3401	Fluid Mechanics and Thermodynamics
DMX3572	Applied Electronics	DMX3304	Applied Electronics
DMX3573	Modeling of Mechatronics Systems		None
DMX3574	Electronics, sensors and actuators	DMX3304	Applied Electronics
DMX3374	Principles of Design		None
DMK3370	C Programming	EEX3417	Software Development for Engineers
DMW3001	Workshop Practice	DMX3101	Workshop Practice
DMX4335	Production Management		None
DMX4342	Applied Automotive Electronics	DMX5209	Automotive Electronics
DMX4530	Production Technology	DMX4212	Manufacturing Engineering
DMX4532	Automobile Technology	DMX4208	Automobile Technology
DMX4533	Materials Engineering	DMX3203	Introduction to Engineering Materials
		DMX5204	Materials Engineering
DMX4543	Control Systems Engineering	DMX5403	Control Systems Engineering
DMX4571	Sensors and Actuators	DMX4409	Sensors
		DMX4410	Electrical & Pneumatic Machines
DMX4572	Vibration and Fault Diagnosis	DMX4204	Machine Dynamics
DMX4573	Mechatronics Product Design	DMX5316	Mechatronics Product Design
DMX4575	Strength of Materials I	DMX4205	Strength of Materials I
DMX4576	Mechanics of Machines	DMX3302	Engineering Mechanics
		DMX4204	Machine Dynamics
DMX4835	Applied Mechanics and Strength of Materials	DMX3302	Engineering Mechanics
		DMX4204	Machine Dynamics
		DMX4205	Strength of Materials I
DMX5531	Applied Thermodynamics	DMX4202	Applied Thermodynamics I
		DMX5205	Applied Thermodynamics II
DMX5532	Strength of Materials II	DMX5302	Strength of Materials II
DMX5533	Dynamics of Mechanical Systems	DMX5201	Advanced Engineering Mechanics
DMX5570	Power Electronics & Motor Drives	DMX5313	Power Electronics & Motor Drives
DMX5571	Machine Vision	DMX5314	Machine Vision
DMX5572	Materials & Manufacturing Technology	DMX3203	Introduction to Engineering Materials
		DMX3206	Introduction to Manufacturing Processes
DMX5577	Machine Design	DMX4306	Design of Machine Elements
		DMX5307	Mechanical Engineering Design Project
DMM5836	Management for Engineers	AGM4307	Economics and Marketing for Engineers
		CVM5401	Accounting for Engineers
		DMM6601	Management for Engineers

Alternative Course		Course of the Revised Curriculum	
DMK5501	Computer Aided Drafting and Modeling	None	
DMX6570	Factory Automation	DMX7304	Factory Automation
DMX6571	Robotics	DMX7303	Control of Robotic Manipulators
DMX6573	Advanced Control Engineering	DMX5315	Artificial Intelligence
		DMX6306	Modern Control Systems
		DMX7306	Intelligent Control Systems
DMX6530	Mechanics of Materials	None	
DMX6531	Automobile Engineering	DMX5208	Automobile Engineering
DMX6532	Vehicle Dynamics	DMX5210	Vehicle Dynamics and Design of Automotive components
DMX6534	Advanced Manufacturing Technology	DMX5212	Computer Aided Design and Manufacturing
DMX6535	Thermal Power Generation	DMX7301	Thermal Power Generation
DMX6536	New and Renewable Sources of Energy	DMX7305	Renewable Sources of Energy
DMX6540	Industrial Engineering	DMX6301	Industrial Engineering
DMX6578	Fluid Mechanics	DMX4203	Applied Fluid Dynamics I
		DMX5206	Applied Fluid Dynamics II
DMY6397	Project Identification and Literature Survey	None	
DMY6A98	Individual Project Type A (Mechanical)	DMY7880	Engineering Research project (Mechanical)
DMY6D95	Individual Project Type B (Mechanical)	DMY7880	Engineering Research Project (Mechanical)
DMY6A96	Group Project (Mechanical)	DMY7880	Engineering Research project (Mechanical)
DMY6D73	Mechatronic Product Design Project (Individual)	DMY7881	Engineering Research Project (Mechatronics)
DMY6A74	Mechatronic Product Design Project (Group)	DMY7881	Engineering Research Project (Mechatronics)
DMW4002	Industrial Training I (Mechanical)	DMW4801	Industrial Training (Mechanical - Diploma)
DMW5002	Industrial Training II (Mechanical)	DMW6801	Industrial Training (Mechanical - Undergraduate)
DMW4003	Industrial Training I (Mechatronics)	DMW4802	Industrial Training (Mechanical –Diploma)
DMW5003	Industrial Training II (Mechatronics)	DMW6802	Industrial Training (Mechanical – Undergraduate)

#### Courses offered by the Department of Textile and Apparel Technology

Alternative Course		Course of the Revised Curriculum	
TAX3531	Fibre science and technology	TAX3458	Fibre science and technology
TAX3532	Yarn manufacture I	TAX3459	Yarn manufacture I
TAX3539	Garment analysis and sewing machinery	TAX3331	Garment analysis and sewing machinery
TAI3536	Fabric structure and analysis	TAX5648	Fabric structure and analysis

Alternative Course		Course of the Revised Curriculum	
TAI3541	Production planning and organization	TAX4438	Production planning and organization
TAX4533	Quality assurance for textiles and clothing	TAX4539	Quality assurance for textiles and clothing
TAX4534	Textile colouration and finishing	TAX4571	Textile colouration and finishing
TAX4538	Garment manufacture	TAX4540	Garment manufacture
TAX4560	Woven fabric technology	TAX4560	Woven fabric technology
TAM4539	Management studies	TAM3234	Basics of Human Resource Management
		TAM3535	Management studies
TAX5532	Yarn and fabric mechanics	TAX7464	Yarn and fabric mechanics
TAX5534	Plant utilities	TAX5547	Plant utilities
TAX5560	Pattern development	TAX4462	Pattern development
TAX5562	Knitting technology	TAX4361	Knitting technology
TAM5861	Textile management and merchandising	None	
TAX6533	Technical textiles	TAX6454	Technical textiles
TAM6335	Textile product engineering	TAX6263	Textile product engineering
TAX6539	Ergonomics	TAX6556	Ergonomics
TAX6560	Advanced woven fabric technology	TAX7369	Engineering Aspects of Weaving
		TAX6265	Advanced Weaving Preparation and Machinery
TAX6561	Yarn manufacture II	TAX6366	Yarn manufacture II
TAX6362	Advanced coloration	TAX6367	Advanced coloration
TAX6563	Specialty fabrics	TAX7368	Specialty fabrics
TAX6564	Nonwoven textiles	TAX5349	Nonwoven textiles
TAY6D95	Individual project-Type B (Textile and Apparel)	TAY7880	Engineering Research Project (Textile and Clothing Engineering)
TAY6397	Project identification and literature survey	TAY7880	Engineering Research Project (Textile and Clothing Engineering)
TAY6A98	Individual project –Type A (Textile and Apparel)		
TAW4001	Industrial training (Apparel I)	TAW4401	Specific training I (Apparel)
TAW5003	Industrial training (Yarn manufacture)	TAW5403	Specific training II (Yarn manufacture)
TAW5004	Industrial training (Weaving)	TAW5404	Specific training II (Weaving)
TAW5005	Industrial training (Chemical processing)	TAW5405	Specific training II (Chemical processing)
TAW5006	Industrial training (Knitting)	TAW5406	Specific training II (Knitting)

### Courses offered by the Department of Mathematics and Philosophy of Engineering

Alternative Course	Course of the Revised Curriculum
MHZ3531 Engineering mathematics 1A	MHZ3551 Engineering Mathematics I
MHZ3332 Engineering mathematics 1B	MHZ3552 Engineering Mathematics II
LLJ3360 Introduction to Laws of Sri Lanka	LLJ3245 Introduction to Laws of Sri Lanka
MHZ4530 Engineering Mathematics II	MHZ4553 Engineering Mathematics III
MHZ4340 Discrete Mathematics I	MHZ4256 Mathematics for Computing
MHZ5530 Engineering Mathematics III	MHZ5554 Engineering Mathematics IV
MHZ5340 Discrete Mathematics II	MHZ5355 Discrete Mathematics
MHJ5533 Technology, Society and Environment	MHJ5342 Technology, Society and Environment
MHJ5531 Nature of Science	MHJ5343 Nature of Science

### Courses of Bachelor of Industrial Studies Honours Study Programme

#### Courses offered by the Department of Agricultural and Plantation Engineering

Alternative Course	Course of the Revised Curriculum
AGI3534 Agricultural Biology I	AGI3551 Agricultural Biology
AGI3535 Land and Soil Tillage Management	AGI3450 Land and soil Tillage Management
AGI3536 Postharvest biology and Technology I	AGI4561 Postharvest Biology and Technology
AGX4539 Crop Production and Farming System	AGI3552 Crop Production Technologies
ADU3318 Bio Statistics	MHZ4357 Applied Statistics
AGZ3538 Mathematics for Agriculture	MHZ3458 Mathematics for Agriculture
AGJ4533 Rural Sociology	AGJ6381 Rural Sociology
AGX4530 Integrated Crop Protection	AGI3553 Plant Protection
AGX4540 Plant and Soil Science	AGX4356 Soil Science
ADU4319 Design and Analysis of Experiments	AGZ5367 Experimental Design
AGX4531 Food and Nutrition	AGI4559 Food and Nutrition
AGX4537 Irrigation and Drainage Engineering	AGI4555 Irrigation and Drainage Engineering
AGM4535 Agricultural Marketing	AGM4363 Agricultural Marketing
AGI4538 Agricultural Biology II	AGI5471 Animal Biology
AGM4534 Agricultural Economics and Management	AGM5475 Economics and Management
AGX4532 Soil and Water Conservation	AGX6490 Soil and Water Conservation
AGX5543 Farm Power and Machinery	AGI5364 Farm Power and Machinery
AGX5532 Soil Plant and Water Relationship	AGX5565 Soil Plant and Water Relationship
AGX6535 Hydrology and water Resources	AGI6478 Hydrology and Water Resources
AGJ5540 Indigenous Knowledge of Herbal Products	AGJ5368 Indigenous Knowledge of Herbal Products
AGM5546 Agricultural Extension	AGM6379 Agricultural Extension
AGI5530 Fisheries and Aquaculture	AGI5572 Fisheries and Aquaculture
AGI5541 Agricultural Biotechnology	AGI5569 Molecular Biology and Biotechnology

Alternative Course		Course of the Revised Curriculum	
AGI6238	Fruit Crop and Cut Flower Production	AGI5274	Fruit Crop and Cut Flower Production
AGX6534	Environmental Control In Farm Structures	AGI4362	Environmental Agriculture
AGY6D96	Individual Project (Agriculture)	AGY6880	Individual Project (Agriculture)
AGI6539	Animal husbandry and Production	AGI4460	Animal Husbandry and Production
AGI6232	Ground water resources management	AGX6283	Ground Water resources Management
AGI6237	Impact of Climate Change on Water resources	AGX6284	Impacts of Climate Change on Water Resources
AGX6536	Food Processing	AGI6582	Food Processing
AGI6550	Advanced Biotechnology	AGI6585	Applications in Biotechnology
AGW4002	Industrial Training I (Agriculture)	AGW4401	Specific Training I
AGW5002	Industrial Training II (Agriculture)	AGW5401	Specific Training II

### Courses offered by the Department of Textile and Apparel Technology

Alternative Course		Course of the Revised Curriculum	
TAX3531	Fibre science and technology	TAX3458	Fibre science and technology
TAX3532	Yarn manufacture I	TAX3459	Yarn manufacture I
TAX3534	Textile preparation	TAX3370	Textile preparation
TAX3537	Fibre to fabrics	TAX3530	Fibre to fabrics
TAX3539	Garment analysis and sewing machinery	TAX3331	Garment analysis and sewing machinery
TAI3536	Fabric structure and analysis	TAX5648	Fabric structure and analysis
TAI3538	Garment accessories	TAI3332	Garment accessories
TAI3540	Pattern construction	TAI3533	Pattern construction
TAI3541	Production planning and organisation	TAX4438	Production planning and organisation
TAI3342	Concept of fashion	TAI4371	Concept of fashion
TAI3543	Concepts of fashion design	TAI4472	Concepts of fashion design
TAJ3346	Fashion illustration I	TAI3270	Fashion illustration I
TAX4538	Garment manufacture	TAX4540	Garment manufacture
TAI4545	Process of fashion design	TAI4474	Process of fashion design
TAX4532	Textile colouration	TAX5551	Textile colouration
TAX4533	Quality assurance for textiles and clothing	TAX4539	Quality assurance for textiles and clothing
TAX4534	Textile colouration and finishing	TAX4571	Textile colouration and finishing
TAX4542	Knitted garment technology	TAX4441	Knitted garment technology
TAX4560	Woven fabric technology	TAX4560	Woven fabric technology
TAZ4541	Statistics for industrial studies	TAZ3536	Statistics for industrial studies
TAJ4547	Fashion Illustration II	TAI4373	Fashion Illustration II

Alternative Course		Course of the Revised Curriculum	
AM4539	Management studies	TAM3234	Basics of Human Resource Management
		TAM3535	Management studies
AX5532	Yarn and fabric mechanics	TAX7464	Yarn and fabric mechanics
TAX5534	Plant utilities	TAX5547	Plant utilities
TAX6565	Fabric technology	TAX6455	Fabric technology
TAX6564	Non woven textiles	TAX5349	Non woven textiles
TAX6537	Speciality fabrics	TAX7368	Speciality fabrics
TAX5562	Knitting technology	TAX4361	Knitting technology
TAI5538	Advanced pattern construction	TAI4442	Advanced pattern construction
TAI5339	Current topics in textiles and clothing	TAI5246	Current topics in textiles and clothing
TAI5543	Principles of fashion design	TAI5552	Principles of fashion design
TAI5345	Foundation garments	TAI4243	Foundation garments
TAI5346	Industrial garment washing and finishing	TAI4344	Industrial garment washing and finishing
TAI5348	Design through draping	TAI5375	Design through draping
TAI5354	Computer aided pattern drafting	TAI5376	Computer aided pattern drafting
TAI5359	Computer aided fashion illustration	TAI5277	Computer aided fashion illustration
TAI5563	Fashion design development	TAI5478	Fashion design development
TAZ5544	Quantitative techniques	TAZ5550	Quantitative techniques
TAM5540	Apparel merchandising	TAM4445	Apparel merchandising
TAJ5342	History & traditions of clothing	TAJ5353	History & traditions of clothing
TAX6533	Technical textiles	TAX6454	Technical textiles
TAX6335	Textile product engineering	TAX6263	Textile product engineering
TAX6539	Ergonomics	TAX6556	Ergonomics
TAX6560	Advanced woven fabric technology	TAX7369	Engineering Aspects of Weaving
		TAX6265	Advanced Weaving Preparation and Machinery
TAX6561	Yarn manufacture II	TAX6366	Yarn manufacture II
TAX6362	Advanced coloration	TAX6367	Advanced coloration
TAX6563	Speciality fabrics	TAX7368	Speciality fabrics
TAI6869	Visual presentation and exhibition design	TAI5579	Theoretical Aspects of Visual presentation and exhibition design
TAI6549	Fashion show production	TAI6580	Fashion show production
AM6540	Fashion marketing	TAM6457	Fashion marketing
TAY6D95	Individual project-Type B (Textile and Apparel)	TAY6F81	Research project (Apparel production) or
		TAY6883	Research Project (Textile Manufacture)
TAY6390	Inspiration of fashion design	TAY5284	Inspiration of fashion design
TAY6A91	Creative fashion design	TAY6885	Creating and Exhibiting Fashion Products
TAY6397	Project identification and literature survey	TAY6F81	Research project (Apparel production) or
TAY6A98	Individual project -Type A (Textile and Apparel)		Research Project (Textile Manufacture)
TAW4001	Industrial training (Apparel I)	TAW4401	Industrial training (Apparel I)

Alternative Course		Course of the Revised Curriculum	
TAW4002	Industrial training (Fashion)	TAW4402	Industrial training (Fashion)
TAW5001	Industrial training (Apparel II)	TAW5401	Industrial training (Apparel II)
TAW5002	Industrial training (Fashion design and product development)	TAW5402	Industrial training (Fashion design and product development)
TAW5003	Industrial training (Yarn manufacture)	TAW5403	Industrial training (Yarn manufacture)
TAW5004	Industrial training (Weaving)	TAW5404	Industrial training (Weaving)
TAW5005	Industrial training (Chemical processing)	TAW5405	Industrial training (Chemical processing)
TAW5006	Industrial training (Knitting)	TAW5406	Industrial training (Knitting)

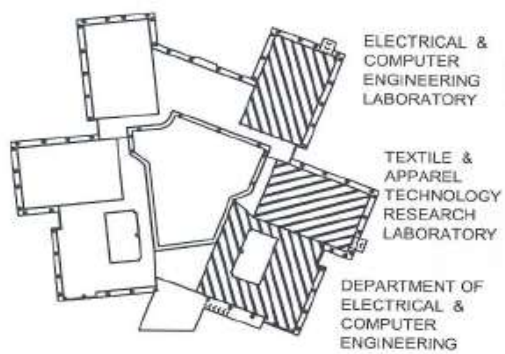
### Courses of Bachelor of Software Engineering Honours Study Programme

Alternative Course		Course of the Revised Curriculum	
EEX5563	Computer organization and operating systems	EEX5563	Computer organization and operating systems
EEI5361	Human computer interaction	EEI4361	User Experience Engineering
EEI5567	Software quality assurance and testing	EEI5467	Software Testing and Quality Assurance
EEI5566	Advanced database systems	EEI5466	Advanced Database Systems
EEI5565	Software construction	EEX6363	Compiler Construction
MHZ5360	Discrete mathematics II	MHZ5355	Discrete Mathematics
MHJ5563	Technology, society and environment	MHJ5342	Technology, Society and Environment
EEM5860	Management and professional issues	AGM4307	Economics and Marketing for Engineers
		CVM5401	Accounting for Engineers
		DMM6601	Management for Engineers
EEX6563	Software construction	EEX6363	Compiler Construction
EEI6560	Software project management	EEI6360	Software Project Management
EEI6567	Software architecture and design	EEI6567	Software architecture and design
EEI6565	Artificial intelligence techniques	EEX6340	AI Techniques and Agent Technology
		EEX6278	Neural Networks and Fuzzy Logic Applications
EEY6A89	Group Project (Software Engineering)	EEY6A89	Final Project – Software Engineering
		EEY4189	Software Design in Group
EEW4080	Specific Training I (Software Engineering)	EEW5811	Industrial Training - Software
EEW4081	Specific Training II (Software Engineering)		
EEW5011	Industrial Training Module (Software Engineering)	EEW5811	Industrial Training - Software

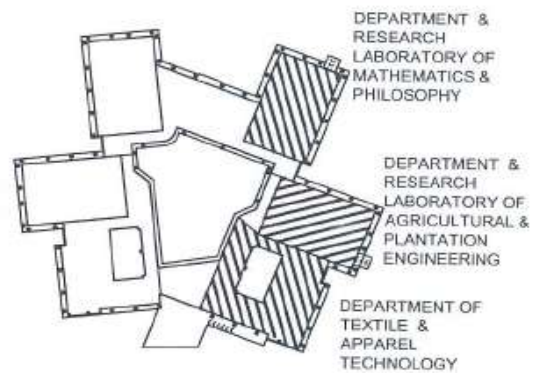


## Annex 4: Layout of the Central Campus, Nawala

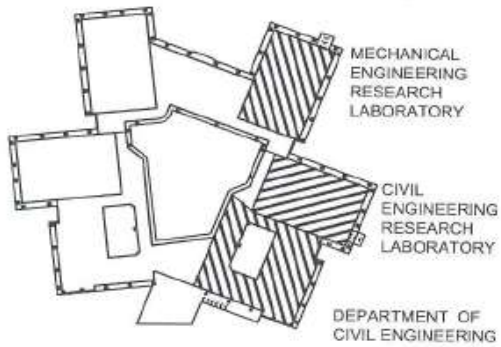




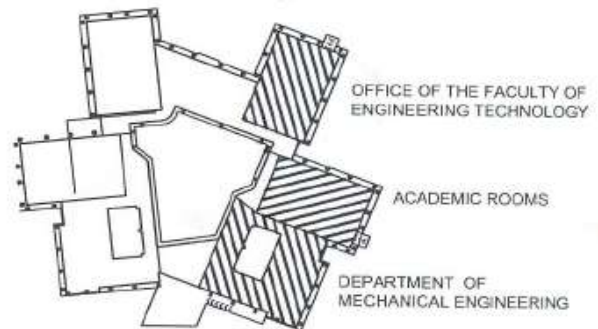
SECOND FLOOR



THIRD FLOOR



GROUND FLOOR



FIRST FLOOR

**Allocation of Academic Departments in New Science and Technology Building**

## **Prepared by the Faculty Registration Committee – 2019/2020**

Dr (Mrs) H. K. L. K. Gunasekara (Chairperson)	- Department of Agricultural & Plantation Engineering
Dr.(Mrs) H. U. W. Rathnayake (Past Chairperson)	- Department of Electrical & Computer Engineering
Mr. P. K. J. de Mel	- Department of Agricultural & Plantation Engineering
Dr. T. L. Pradeep	- Department of Civil Engineering
Ms. R. H. G. Shasikala	- Department of Electrical & Computer Engineering
Dr. (Mrs) K. D. N. Kumari	- Department of Mathematics & Philosophy of Engineering
Dr. (Mrs) I.U. Atthanayake	- Department of Mechanical Engineering
Mrs. T. P. G. N. T. Alwis	- Department of Textile & Apparel Technology
Mr. S.M. Janaka Ranjana	- Assistant Registrar /Faculty of Engineering Technology

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