

Regulation No 1.1.3.1 (I)

THE OPEN UNIVERSITY OF SRI LANKA
REGULATIONS FOR THE AWARD OF BACHELOR OF TECHNOLOGY
HONOURS IN ENGINEERING DEGREE AND
HIGHER DIPLOMA IN AN APPROVED TECHNOLOGY DISCIPLINE

(Prepared under Section 135 of the Universities Act No. 16 of 1978 read with Ordinance No. 1 of 1990 as amended.)

These Regulations for the Award of Bachelor of Technology Honours in Engineering Degree and Higher Diploma in an approved Technology discipline, referred to hereinafter as the Regulations, may be cited as Regulation No. 1.1.3.1(I), and being approved by the Council of The Open University of Sri Lanka at its meeting held on shall be deemed to be the Regulations which replace the regulations 1.4.3.1 and 1.1.3.1 approved by the Council of the OUSL at its..... meeting held on The Regulation shall be read in conjunction with “The General By-law for the award of credit certificates, certificates, advanced certificates, diplomas, degrees, postgraduate diplomas and higher degrees” referred to hereinafter as the General By-law.

These Regulations shall come into force with effect from the academic year 2014/15.

1 Award of the Degree of Bachelor of Technology Honours in Engineering and the Higher Diploma in an approved technology discipline

1.1 The Degree of Bachelor of Technology Honours in Engineering, referred to hereinafter as **the Degree**, and the Higher Diploma in an approved technology discipline, referred to hereinafter as **the Higher Diploma** may be awarded by The Open University of Sri Lanka to a student who has fulfilled all the requirements for an award as specified in the General By-law, and in particular has:

1.1.1 fulfilled all the requirements for admission to the Programme of Study leading to the award of the Degree and the Higher Diploma, referred to hereinafter **the Programme of Study**, as set out in Section 2 of this Regulation, and

1.1.2 paid the fees prescribed by the University in accordance with the “Rules for the award of Bachelor of Technology Honours in Engineering Degree and Higher Diploma in an approved Technology Discipline” referred to hereinafter as **the Rules**, and

1.1.3 completed the prescribed courses and the other requirements to the satisfaction of the Senate of the University as set out in Section 3 and in the Rules.

1.2 A student who has successfully completed the prescribed courses and the other requirements shall be awarded pass/honours in accordance with the Section 3.1.2 of the Rules.

2 Eligibility for Admission to the Programme of Study

2.1 A person seeking admission to the Programme of Study shall be required to have

2.1.1 obtained passes in the subjects, Combined mathematics, Physics and Chemistry from General Certificate in Education (Advanced Level) Examination, Sri Lanka, or

2.1.2 obtained, by virtue of qualifications listed in the Schedule 1(e) to the Rules, a minimum total of 36 credits with minimum of 12 credits in each of the categories A, B and C, listed therein, or

2.1.3 secured an equivalent or higher qualification acceptable to the Senate

3. The Programme of Study

3.1 The Programme of Study shall consist of a combination of courses and training modules as determined by the Senate and as specified in the Rules. The Rules shall specify the **category**, the **level** and the **credit rating** of each course, and the type and the duration of each training module in the Programme of Study.

A student shall have acquired either by successful completion in accordance with the Scheme of Assessment or by exemption, as set out in the Rules, course credits and industrial training requirements as referred to in Section 3.1.1 for the award of the Degree, and in Section 3.1.2 for the award of the Higher Diploma.

3.1.1 Requirements for the award of the Degree

A student shall have satisfied the requirements referred to in Section 3.1.1(a) and 3.1.1(b) for the award of Bachelor of Technology Honours in Engineering Degree.

3.1.1 (a) Course credits

A total of 177 credits from level 3 and above, from among the courses listed and categorised in Schedule 1(a) to the Rules. The courses shall be selected so as to meet the minimum credit requirements in each category as shown in the Table 3.1.1 below.

If the credits gained in any category exceed the maximum limit shown; only such maximum credits shall be used in computing the total credits. In situations where a student has obtained credits in excess of maximum, such excess credits shall be eliminated by considering level 3 courses first and then 4, 5, and 6, such that the maximum possible credits are counted in each category.

These eliminated courses shall not be in the course combinations shown in Schedule 1(b) to the Rules, under any given specialisation in the relevant field of engineering, if applicable.

Table 3.1.1 Course credits requirements for the award of Bachelor of Technology Honours in Engineering Degree

Category	Letter denoting category	Minimum credits	Maximum credits
Engineering	X	114 subject to a minimum of 45 at levels 5 and 6, of which at least 18 at level 6.	126 subject to a minimum of 45 at levels 5 and 6, of which at least 18 at level 6.
Engineering projects	Y	12 subject to a minimum of 12 at level 6.	24 subject to a minimum of 12 at level 6.
Mathematics	Z	21 subject to a minimum of 6 at levels 5 and 6.	33 subject to a minimum of 6 at levels 5 and 6.
General	J	9	18
Management	M	9	18
Industrial	I	0	6
English	L/E	0	6
Computer literacy	K	0	6
Total		177 subject to a minimum of 84 at levels 5 and 6, of which at least 36 is at level 6.	

3.1.1 (b) Industrial training

A pass in Workshop Practice and industrial training module/s equivalent to 30 weeks duration listed in Schedule 1(a) to the Rules

3.1.1(c) Specialization

If, in addition to the requirements of 3.1.1(a) and 3.1.1(b), the selection of courses includes the course combinations and the training modules shown in Schedule 1(b) to the Rules under any given field, then, the Degree shall be awarded with the specialisation in that field.

3.1.2 Requirements for the award of the Higher Diploma

A student shall have satisfied the requirements referred to in Section 3.1.2(a), 3.1.2(b) and 3.1.2 (c) for the award of Higher Diploma in an approved discipline.

3.1.2 (a) Course credits

A total of 90 credits from level 3 and above, from among the courses listed and categorised in Schedule 1(a) to the Rules. The courses shall be selected so as to meet the minimum credit requirements in each category as shown in the Table 3.1.2 below.

If the credits gained in any category exceed the maximum limit shown; only such maximum credits shall be used in computing the total credits. In situations where a student has obtained credits in excess of maximum, such excess credits shall be eliminated by considering level 3 courses first and then 4, 5, and 6, such that the maximum possible credits are counted in each category.

These eliminated courses shall not be in the course combinations shown in Schedule 1(b) to the Rules, under any given technology discipline.

Table 3.1.2 Course credits requirements for the award of Higher Diploma in an approved discipline

Category	Letter denoting category	Minimum credits	Maximum credits
Engineering	X	60 of which at least 18 at level 4 or above.	81 of which at least 18 at level 4 or above.
Engineering projects	Y	0	6
Mathematics	Z	9	18
General	J	0	6
Management	M	0	6
Industrial	I	0	6
English	L/E	0	6
Computer literacy	K	0	6
Total		90 of which at least 36 at level 4 or above	

3.1.2 (b) Industrial training

A pass in Workshop Practice and industrial training module/s equivalent to 30 weeks duration listed in Schedule 1(a) to the Rules.

3.1.2(c) Technology Discipline

The selection of courses shall include the course combinations and the training modules shown in Schedule 1(b) to the Rules under any given technology discipline, and such course combinations and training modules shall be considered as an approved technology discipline.

- 3.2 A student may acquire the credits required under Section 3.1.1 and 3.1.2 above in any number of academic years, not necessarily consecutive, provided that he/she maintains his/her registration as a student or has his/her registration reactivated in accordance with Section 4.9 of the General By-law.
- 3.3 The acquisition of the required credits shall be subject to the restrictions laid down in Schedule 1(e), which specifies certain combinations of courses as being “excluded.”
- 3.4 Registration for courses and training modules at any given level shall be in accordance with the Section 1.2 of the Rules made under this Regulation.

4 Exemptions

- 4.1 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) or from the requirement of obtaining a pass in training modules towards the award in recognition of previously obtained qualifications and experience or other achievement.
- 4.2 Notwithstanding any exemptions so granted, a student shall acquire, by successful completion in accordance with the Scheme of Assessment, a minimum number of credits as referred to in 4.2.1 of the Regulations for the award of the Degree, and in 4.2.2 of the Regulations for the award of the Higher Diploma.
 - 4.2.1 Minimum credit requirement a student shall acquire by successful completion in accordance with the Scheme of Assessment for the award of the Degree is 90 credits at level 3 and/or above, of which 42 credits at levels 5 and 6, and at least 18 credits from level 6, with 33 credits from categories of Engineering, Engineering Projects and Mathematics.
 - 4.2.2 Minimum credit requirement a student shall acquire by successful completion in accordance with the Scheme of Assessment for the award of the Higher Diploma is 45 credits at level 3 and/or 4, and at least 18 credits from level 4 with 36 credits from categories of Engineering and Mathematics, of which 9 credits at level 4.
- 4.3 Exemptions shall be granted in the manner specified in the Section 4 of the Rules.

5 Credit Transfer

Credit transfer from the courses in the old curricula shall be granted as specified in the Section 5 of the Rules.

6 Rules and Revisions

- 6.1 Rules for the award of Bachelor of Technology Honours in Engineering Degree and Higher Diploma in an approved technology discipline shall be made by the Senate.

- 6.2 This Regulation may be revised, amended or repealed as and when deemed necessary by the Senate.
- 6.3 Such revisions, amendments or repeals shall come into effect as determined by the Senate and approved by the Council.

Regulation No1.1.3.1 (I)

THE OPEN UNIVERSITY OF SRI LANKA
RULES FOR THE AWARD OF BACHELOR OF TECHNOLOGY HONOURS IN
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HIGHER DIPLOMA IN AN APPROVED TECHNOLOGY DISCIPLINE

(Prepared under Section 135 of the Universities Act No. 16 of 1978 read with Ordinance No. 1 of 1990 as amended.)

These Rules for the Award of Bachelor of Technology Honours in Engineering Degree and Higher Diploma in Technology in an approved technology discipline, referred to hereinafter as Rules, may be cited as Rule No. 1.1.3.1(I) and being approved by the Council of The Open University of Sri Lanka at its meeting held on shall be deemed to be the Rules which replace the Rules 1.4.3.1 and 1.1.3.1 approved by the Council of the OUSL at its meeting held on The Rules shall be read in conjunction with “The General By-law for the award of credit certificates, certificates, advanced certificates, diplomas, degrees, postgraduate diplomas and higher degrees” referred to hereinafter as the General By-law.

These Rules shall come into force with effect from the academic year 2014/15.

1 Registration for the Programme of Study leading to the Award of Bachelor of Technology Honours in Engineering Degree and Higher Diploma in an approved Technology discipline

- 1.1 A person has to be eligible for admission, and be so admitted, to the Programme of Study leading to the award of Bachelor of Technology Honours in Engineering Degree, referred to hereinafter as **the Degree** and the Higher Diploma in an approved technology discipline, referred to hereinafter as **the Higher Diploma**, in accordance with the General By-law and the Regulations before he/she can register for any of the courses and the training modules in the Programme of Study.
- 1.2 A person may register for courses and the industrial training modules in the Programme of Study subject to limits on the credit ratings and any other conditions as laid down in the General By-law and the Regulations, provided that the requirements specified by the Faculty of Engineering Technology in respect of each course are satisfied.

2 Scheme of Assessment

- 2.1 The assessment of a student in any course shall consist of two components, viz.: Continuous Assessment and Final Examination.
- 2.1.1 The content, nature and weightage of each of these components shall be in accordance with the Rules relating to the scheme and method of assessment as determined by the Faculty.
- 2.1.2 A student shall be eligible to appear at the Final Examination of any course only if he/she has been awarded a minimum of 40% for the Continuous Assessment component of that course. The eligibility thus obtained to sit for the Final Examination of a course shall be valid for a period stipulated by the Senate.
- 2.1.3 A student who fails to obtain 40% for Continuous Assessment or fails to obtain a grade C or higher at the Final Examination before the lapse of the eligibility in respect of any course, shall be deemed to have failed that course and shall be awarded the grade F. Such a student may repeat that course by re-registering subject to Section 2.1.6 of the Rules.
- 2.1.4 The overall assessment mark (Z%) of a student in respect of any course shall be based on the Continuous Assessment mark (X%) and the mark obtained at the Final Examination (Y%) and shall be computed and grades awarded as given in Table 2.1.4(a).

For courses offered by the Faculty of Engineering Technology;

$$Z = \begin{cases} 0.5X + 0.5Y, & \text{if } Y \geq 40 \\ Y, & \text{if } Y < 40 \end{cases}$$

Table 2.1.4(a) Calculation of Grades and GPV from Overall Assessment Mark (Z%)

Overall Assessment Mark (Z%)	Grade	Grade Point Value
≥ 85	A+	4.00
75-84	A	4.00
70-74	A -	3.70
63-69	B+	3.30
55-62	B	3.00
50-54	B-	2.70
45-49	C+	2.30
40-44	C	2.00
35-39	C-	1.70
30-34	D+	1.30
20-29	D	1.00
0-19	E	0.00

A+, A, A-, B+, B, B-, C+, and C, constitute Pass grades.

The grades awarded under the previous structure must be recalculated based on the raw overall assessment marks.

However, where the raw marks are not available for a particular course, the grades PA+, PA, PB, PC, PD, RE and RF already awarded under the previous structure shall be converted as given in Table 2.1.4(b).

Table 2.1.4(b) Conversion of Grades from previous structure to present structure

Grade in the previous structure	Grade in the present structure
PA+	A+
PA	A
PB	B+
PC	B-
PD	C
RE	D+
RF	D

For courses offered by other faculties of the Open University of Sri Lanka the grades awarded shall be in accordance with the rules pertaining to the scheme of assessment of such courses

- 2.1.5 A student who is awarded a grade C-, D+, D or E for a particular course cannot count that course towards his/her credit requirements unless he/she re-sits the Final Examination on a subsequent occasion and obtains a pass grade.
- 2.1.6 A student who either repeats a course or re-sits a Final Examination or is exempted from a course shall be deemed to have obtained a mark which is not higher than 40% and a grade not higher than C.
- 2.1.7 A student who withdraws from a course by a written communication addressed to the Registrar within a period of two months from the commencement of the Programme of Study or before a date stipulated by the Faculty may be allowed to re-register for that course in a subsequent academic year without being considered a repeat student. The date of commencement of the Programme of Study shall be as determined by the Senate, for the purpose of this Rule.
- 2.1.8 A student who is eligible to sit for the Final Examination in a course (under Section 2.1.2) but has not done so may postpone sitting such examination, for a period stipulated by the Senate, without being considered as a re-sit candidate. Such a student shall be awarded the grade RX in respect of that course in which he/she is so absent.

2.1.9 The assessment of each individual student in a course, in accordance with the Rules, shall be carried out by a Panel of Examiners constituted as follows.

Dean of Faculty of Engineering Technology (Chairperson),

Deans of other relevant Faculties

Heads of Departments in the Faculty of Engineering Technology,

Chief Examiner,

Setting Examiner(s) and Marking Examiner(s)

The Senior Assistant Registrar/Examinations shall function as the Secretary to the Panel of Examiners.

2.2 The assessment of training modules shall be carried out in accordance with the Faculty approved guidelines, by an Assessment Panel appointed by the Faculty.

2.2.1 A student who is successful at the Final Assessment shall be awarded “Pass” in respect of that training module with no credits granted.

2.2.2 A student who is unsuccessful at the Final Assessment shall be considered as “Fail”, and he/she shall be required either to repeat the training modules or to meet the requirements as recommended by the Examiner(s), and obtain a “Pass”.

3 Awards

There shall be two awards in the Programme of Study as referred to in Section 3.1 of the Rules, Bachelor of Technology Honours in Engineering Degree, and in Section 3.2 of the Rules, Higher Diploma in an approved technology discipline.

3.1 Award of Bachelor of Technology Honours Engineering Degree

3.1.1 A candidate who obtains a minimum of 177 credits with grade C or above from level 3 and above and satisfies the training requirements for the award of the Degree of Bachelor of Technology Honours in Engineering as specified in Section 3 and Section 4 of the Regulations and satisfies any other academic requirements imposed by the Senate, and applies for the award of the Degree of Bachelor of Technology Honours in Engineering in a prescribed form, shall be awarded the Degree.

3.1.2 A candidate who satisfies 3.1.1 within a maximum stipulated period as determined by the Senate shall be awarded the Degree with:

First Class Honours, or

Second Class Honours (Upper Division) or

Second Class Honours (Lower Division) based on Grade Point Average computed in accordance with the guidelines given in Section 3.1.6.

3.1.3 If a student fails to satisfy 3.1.1 within the stipulated maximum period shall be awarded the Degree without a Class.

3.1.4 Such award in respect of each student shall be recommended to the Senate by a Board of Examiners constituted as follows:

Vice Chancellor (Chairperson),
Dean of Faculty of Engineering Technology,
Heads of Departments that offer courses of the Study Programme,
Chief Examiners and Setting Examiners of all courses

The Senior Assistant Registrar/ Examinations shall function as the Secretary to the Board of Examiners.

In making its recommendations to the Senate the Board of Examiners shall take into consideration the guidelines set out in Section 3.1.6, but shall use its discretion in appropriate situations.

3.1.5 The Board of Examiners shall also recommend the award of medals and prizes to the Senate.

3.1.6 Grade Point Average (GPA) shall be computed by considering the courses at levels 4, 5 and 6 for a student who has satisfied the conditions for the award of the Degree of Bachelor of Technology Honours in Engineering in accordance with Regulation 3.1, in line with the procedure set out in Sections 3.1.6(a), 3.1.6 (b), and 3.1.6 (c).

3.1.6(a) The courses at levels 4, 5 and 6 that proceed towards the calculation of credits for the award of the Degree of Bachelor of Technology Honours in Engineering, in accordance with Regulation 3.1, shall be allotted Grade Point Values (GPV) as stipulated in Table 2.1.4 (a) of the Rules.

3.1.6(b) The courses shall be listed in a priority order according to the Grade Point Values by taking all compulsory courses at levels 5 and 6 first and then compulsory courses at level 4 of the specialization, if applicable.

3.1.6 (c) For the computation of GPA, the courses shall be selected from the list of courses in 3.1.6(b) in the order of listing such that sum of the credits of the courses thus selected is 90. In a situation, where exactly 90 credits cannot be obtained, the courses shall be selected to the nearest value below 90, and the remainder credit shall be taken as a *Part Credit* of the next course in the list in the Section 3.1.6(b).

The Grade Point Average (GPA) shall be computed as follows:

$$GPA = \frac{\{\sum(CreditRatingoftheCourse) * (GPV)\} + (PartCreditoftheCourse) * (GPV)}{90}$$

3.1.7 A candidate shall be awarded the Degree of Bachelor of Technology Honours in Engineering according to the GPA obtained and subject to condition in Section 3.1.2 and Section 3.1.3 as follows

3.00 > GPA \geq 2.00: Pass

3.30 > GPA \geq 3.00: Second Class Honours (Lower Division)

3.70 > GPA \geq 3.30: Second Class Honours (Upper Division)

GPA \geq 3.70: First Class Honours

3.2 Award of Higher Diploma in an approved technology discipline

3.2.1 A candidate who obtains a minimum of 90 credits with grade C or above at level 3 and/or above and satisfies the training requirements for the award of the Higher Diploma as specified in Section 3 and Section 4 of the Regulations, and applies for the award of the Higher Diploma in a prescribed form, shall be awarded such Higher Diploma.

3.2.2 Such Award in respect of each student shall be recommended to the Senate by a Board of Examiners constituted as follows:

Dean of Faculty of Engineering Technology (Chairperson),

Heads of Departments in the Faculty of Engineering Technology,

Chief Examiners and

Setting Examiners of all courses in the programme

The Senior Assistant Registrar/Examinations shall function as the Secretary to the Board of Examiners.

3.2.3 The Board of Examiners shall also recommend the award of medals and prizes, if any, to the Senate.

4 Exemptions

Exemptions may be granted as specified in Regulation 4 and according to Schedule 2 to the Rules. The exemptions other than those given in Schedule 2 may be granted with the approval of the Faculty Board and the Senate.

5 Credit Transfer

A person who has obtained credits by successful completion or by exemption from the courses under the old curricula shall be transferred to the new courses in accordance with Schedule 1(d) of the Rules provided he/she has maintained the registration as a student.

If any such course/s is/are not included in Schedule 1(d), the credits thus obtained may be transferred to the courses/s in the present curriculum as determined by the Senate of the University.

6 Fees

Fees, as specified in Schedule 3 to the Rules, shall be paid on demand.

7 Revision of Rules

7.1 These Rules may be revised, amended or repealed as and when deemed necessary by the Senate.

7.2 Such Revisions, Amendments, and Repeals shall come into force as determined by the Senate and approved by the Council.

Schedule 1(a) – Curriculum (List of courses and training modules) of the Programme of Study.

Part 1: List of courses

Each course is given a course code that reflects the academic department that administers the course (first two letters), the course category (third letter), the level (first digit) and the credit rating (second digit, which is one third of the credit rating).

Level	Course Category	Course Code	Course Title
3	Engineering (X)	AEX3110	Nature and environment
		AEX3230	Crop production and farming systems
		AEX3231	Soil management, tillage and traction
		AEX3232	Plant and soil science
		AEX3233	Post-harvest technology I
		CEX3230	Construction materials
		CEX3231	Structural analysis and design I
		CEX3232	Hydraulics and hydrology
		CEX3233	Surveying I
		CEX3234	Strength of materials
		ECX3210	Electro- Techniques
		ECX3217	Software development for engineers
		ECX3230	Electronics
		ECX3231	Electrical circuits and measurements
		ECX3232	Electrical power
		ECX3233	Communication and information technology
		ECX3234	Electrical technology
		ECX3150	Electronics I
		MEX3211	Communicating engineering information
		MEX3212	Basic thermo-fluids
		MEX3233	Workshop technology
		MEX3234	Engineering drawing
		MEX3235	Thermo-fluids
		MEX3271	Applied mechanics and strength of materials
		MEX3272	Applied electronics
		MEX3273	Modelling of mechatronics systems
		MEX3174	Principles of design
		MEX3274	Electronics, sensors and actuators
		TTX3231	Fibre science and technology
	TTX3232	Yarn manufacture I	
	TTX3239	Garment analysis and sewing machinery	
	TTX3255	Woven fabric technology I	
	Industrial (I)	TTI3235	Apparel production
	TTI3241	Production planning and organization	
	TTI3236	Fabric structure and analysis	

Level	Course Category	Course Code	Course Title
3	Mathematics (Z)	MPZ3231	Engineering mathematics IA
		MPZ3132	Engineering mathematics IB
		MPZ3133	Fundamentals of engineering mathematics
		MPZ3234	Mathematical analysis and numerical computing
	General (J)	LWJ3160	Introduction to laws of Sri Lanka
Computer Literacy (K)	MEK3170	C programming	
	MEK3289	Computer aided drafting	
Language (L or E)	LSE3204	English for General Academic Purposes	
4	Engineering (X)	AEX4230	Integrated crop protection
		AEX4231	Food and nutrition
		AEX4232	Soil & water conservation
		AEX4237	Irrigation and drainage engineering
		AEX4239	Crop Production and farming systems
		AEX4240	Plant and soil science
		CEX4230	Soil mechanics and introduction to rock mechanics
		CEX4231	Structural analysis and design II
		CEX4232	Construction engineering and planning
		CEX4233	Irrigation engineering
		CEX4234	Water supply and sewerage engineering
		CEX4235	Building engineering
		CEX4236	Highway engineering
		CEX4237	Remote sensing and introduction to geographical information systems
		CEX4238	Quantity surveying
		ECX4230	Fault diagnosis in electronic circuits
		ECX4232	Power systems I
		ECX4233	Communications
		ECX4234	Electrical installations
		ECX4235	Data structures and algorithms
		ECX4236	Microprocessors and interfacing
		ECX4237	Software engineering I
		ECX4238	Electrical machines
		ECX4247	Software engineering
		ECX4248	Electrical machines
		ECX4150	Electronics II
		ECX4252	Power systems I
		ECX4262	Object oriented design and programming
		MEX4230	Production technology
		MEX4231	Elementary machine design
		MEX4232	Automobile technology
		MEX4233	Materials engineering
		MEX4234	Plant maintenance and work services
MEX4235	Production management		
MEX4135	Production management		

Level	Course Category	Course Code	Course Title
		MEX4335	Applied mechanics and strength of materials
		MEX4242	Automotive electronics
		MEX4142	Applied automotive electronics
		MEX4243	Controls systems engineering
		MEX4271	Sensors and actuators
		MEX4272	Vibration and faults diagnosis
		MEX4273	Mechatronics product design
		MEX4275	Strength of materials I
		MEX4276	Mechanics of machines
		TTX4231	Knitting and non-woven technology
		TTX4232	Textile colouration
		TTX4233	Quality assurance for textiles and clothing
		TTX4235	Yarn manufacture II
		TTX4238	Garment manufacture
		TTX4255	Advanced woven fabric technology
		TTX4260	Woven fabric technology
Mathematics (Z)	MPZ4230	Engineering mathematics II	
	MPZ4131	Applied statistics	
	MPZ4132	Linear algebra and vector analysis	
Management (M)	AEM4234	Agricultural economics and management	
	AEM4235	Agricultural marketing	
	TTM4239	Management studies	
General (J)	AEJ4233	Rural sociology	
	MPJ4131	History of technology	
5	Engineering (X)	AEX5230	Power and machinery in agriculture
		AEX5231	Post-harvest technology II
		AEX5232	Soil, plant and water relationship
		AEX5237	Irrigation and drainage engineering
		AEX5243	Farm Power and Machinery
		AEX5244	Plantation crop technology
		CEX5230	Surveying II
		CEX5231	Mechanics of fluids
		CEX5232	Engineering geology
		CEX5233	Structural analysis
		ECX5231	Network theory
		ECX5332	Power systems II
		ECX5233	Communication theory and systems
		ECX5234	Data communications
		ECX5235	Operating systems
		ECX5236	Computer architecture
		ECX5237	Software engineering II
		ECX5238	High voltage engineering & electrical machines
		ECX5239	Physical electronics
		ECX5240	Information systems

Level	Course Category	Course Code	Course Title
5	Engineering (X)	ECX5241	Distributed parameter systems
		ECX5243	Physical & Opto Electronics
		ECX5245	Database management systems
		ECX5247	Group work in software development
		ECX5267	Software testing and quality assurance
		MEX5230	Fluid mechanics
		MEX5231	Applied thermodynamics
		MEX5232	Strength of materials II
		MEX5233	Dynamics of mechanical systems
		MEX5270	Power electronic & motor drives
		MEX5271	Machine vision
		MEX5272	Materials & manufacturing technology
		MEX5277	Machine design
		TTX5131	Structure and properties of fibres
		TTX5232	Yarn and fabric mechanics
		TTX5234	Plant utilities
		TTX5237	Speciality fabrics
	TTX5251	Non-woven textiles	
	TTX5260	Pattern development	
	TTX5262	Knitting technology	
Industrial (I)	TTI5139	Current topics in clothing and textiles	
	AEI5243	Farm Power and Machinery	
Mathematics (Z)	MPZ5231	Advanced numerical techniques	
	MPZ5133	Graph theory and automata theory	
	MPZ5134	Stochastic process	
	MPZ5135	Mathematical modelling	
	MPZ5136	Neural network and fuzzy logic	
	MPZ5137	Functional analysis	
Management (M)	MEM5336	Management for engineers	
	TTM5361	Textile management and merchandizing	
General (J)	AEJ5240	Indigenous knowledge of herbal products	
	MEJ5230	Photography	
	MPJ5231	The nature of science	
	MPJ5233	Technology, society and environment	
	MPJ5134	Nature of mathematics I	
Computer Literacy (K)	MEK5201	Computer aided drafting and modelling	
6	Engineering (X)	AEX6230	Environment control in agricultural structures
		AEX6231	Processing of food products
		AEX6233	Hydrology
		AEX6234	Environment control in farm structures
		AEX6235	Hydrology and water resources
		AEX6236	Food processing
		AEX6240	Agriculture mechanization
		AEX6241	Climate change and water management
		AEX6244	Environmental agriculture

Level	Course Category	Course Code	Course Title
6	Engineering (X)	CEX6230	Geotechnics
		CEX6331	Construction engineering and management
		CEX6332	Structural design
		CEX6233	Environmental engineering
		CEX6235	Coastal and hydraulic engineering
		CEX6237	Transportation engineering
		CEX6238	Geotechnical engineering
		CEX6239	Construction management
		ECX6330	Electronic systems
		ECX6332	Power systems planning
		ECX6333	Microwave engineering & applications
		ECX6234	Digital signal processing
		ECX6235	Compiler design
		ECX6236	Processor design
		ECX6239	Wireless communication
		ECX6240	Knowledge engineering
		ECX6241	Field theory
		ECX6242	Modern control systems
		ECX6243	Microwave engineering & applications
		ECX6250	Analog electronic systems
		ECX6151	Digital electronic systems
		MEX6330	Mechanics of materials
		MEX6230	Mechanics of materials
		MEX6331	Automobile engineering
		MEX6231	Automobile engineering
		MEX6332	Vehicle dynamics and design of automotive components
		MEX6232	Vehicle dynamics
		MEX6333	Mechatronics
		MEX6334	Advanced manufacturing technology
		MEX6234	Advanced manufacturing technology
		MEX6335	Thermal power generation
		MEX6235	Thermal power generation
		MEX6236	New and renewable sources of energy
		MEX6340	Industrial engineering
		MEX6240	Industrial engineering
		MEX6270	Factory automation
		MEX6271	Robotics
		MEX6272	Intelligent control
		MEX6273	Advanced control engineering
		MEX6278	Fluid mechanics
TTX6231	Advanced colouration technology		
TTX6233	Technical textiles		

Level	Course Category	Course Code	Course Title
6	Engineering (X)	TTX6135	Textile product engineering
		TTX6239	Ergonomics
		TTX6260	Advanced woven fabric technology
		TTX6261	Yarn manufacture II
		TTX6162	Advanced colouration
		TTX6263	Speciality fabrics
		TTX6264	Non-woven textiles
	Industrial (I)	AEI6234	Environment control in farm structures
		AEI6236	Food processing
	Engineering Projects (Y)	AEY6595	Individual project - Type B (Agricultural Engineering)
		AEY6197	Project identification and literature survey (Agricultural Engineering)
		AEY6496	Group project (Agricultural Engineering)
		AEY6498	Individual project – Type A (Agricultural Engineering)
		CEY6595	Individual project – Type B (Civil)
		CEY6197	Project identification and literature survey (Civil)
		CEY6496	Group project (Civil)
		CEY6498	Individual project – Type A (Civil)
		ECY6194	Special project
		ECY6595	Individual project – Type B (Computer, Electrical, Electronic and Communication)
		ECY6496	Group project (Computer, Electrical, Electronic and Communication)
		ECY6197	Project identification and literature survey (Computer, Electrical, Electronic and Communication)
ECY6498		Individual project – Type A (Computer, Electrical, Electronic and Communication)	
MEY6573		Mechatronic product design project (Individual)	
MEY6474		Mechatronics product design project (Group)	
MEY6595		Individual project – Type B (Mechanical)	
MEY6496		Group project (Mechanical)	
MEY6197	Project identification and literature survey (Mechanical)		
MEY6498	Individual project – Type A (Mechanical)		
TTY6595	Individual project – Type B (Textile and Apparel)		
TTY6496	Group project (Textile and Apparel)		
TTY6197	Project identification and literature survey (Textile and Apparel)		
TTY6498	Individual project – Type A (Textile and Apparel)		

Part 2: List of training modules

Each training module is given a code that reflects the academic department that administers the training module (first two letters), and the level (third letter).

Level	Module Code	Module Title	Duration
3	CEW3001	Industrial training (Civil-advanced certificate)	15 weeks
	ECW3001	Industrial training I (Electronics)	15 weeks
	MEW3001	Workshop practice	10 days
4	AEW4001	Industrial training I (Agricultural Engineering)	15 weeks
	CEW4002	Industrial training (Civil-diploma)	30 weeks
	ECW4001	Industrial training II (Software)	15 weeks
	ECW4002	Industrial training II (Power)	15 weeks
	ECW4003	Industrial training II (Communication)	15 weeks
	MEW4002	Industrial training I (Mechanical)	15 weeks
	MEW4003	Industrial training I (Mechatronics)	15 weeks
TTW4001	Industrial training (Apparel I)	15 weeks	
5	AEW 5001	Industrial training II (Agricultural Engineering)	15weeks
	CEW5003	Industrial training (Civil- undergraduate)	30 weeks
	ECW5001	Industrial training II (Software-undergraduate)	15 weeks
	ECW5002	Industrial training II (Power-undergraduate)	15 weeks
	ECW5003	Industrial training II (Communication-undergraduate)	15 weeks
	MEW5002	Industrial training II (Mechanical)	15 weeks
	MEW5003	Industrial training II (Mechatronics)	15 weeks
	TTW5003	Industrial training (Yarn manufacture)	15 weeks
	TTW5004	Industrial training (Weaving)	15 weeks
	TTW5005	Industrial training (Chemical processing)	15 weeks
TTW5006	Industrial training (Knitting)	15 weeks	

Schedule 1(b): Required courses and training module combinations for the award of Bachelor of Technology Honours in Engineering Degree and the Diploma in Technology in an approved technology discipline

For the Degree: All listed courses and training modules

For the Higher Diploma: Level 3 and Level 4 courses except MPZ4131 and MPZ4132, and all listed training modules. In the case of civil technology discipline CEW4002 could also be acceptable

Level	Degree specialization							
	Agricultural Engineering	Civil Engineering	Computer Engineering	Electrical Engineering	Electronic and Communication Engineering	Mechanical Engineering	Mechatronics Engineering	Textile and Clothing Engineering
	Higher Diploma Technology Discipline							
	Agricultural Technology	Civil Technology	Computer Technology	Electrical Technology	Electronic and Communication Technology	Mechanical Technology	Mechatronics Technology	Textile and Clothing Technology
Courses								
3	MPZ3133* MPZ3234* ECX3210 MEX3211 MEX3212 MEX3234	MPZ3133* MPZ3234* ECX3210 MEX3211 MEX3212 CEX3230 CEX3231 CEX3232 CEX3233 CEX3234	MPZ3133* MPZ3234* MEX3211 MEX3212 ECX3150* ECX3210 ECX3231 ECX3231 ECX3232 ECX3233	MPZ3133* MPZ3234* MEX3211 ECX3150* ECX3210 ECX3231 ECX3233 MEX3235* ECX3232 ECX3233	MPZ3133* MPZ3234* MEX3211 MEX3212 ECX3150* ECX3210 ECX3231 ECX3231 ECX3232 ECX3233	MPZ3133* MPZ3234* ECX3210 MEX3211 MEX3233 MEX3234 MEX3235 MEX3272 MEX3273 MEX3274* MEK3170	MPZ3133* MPZ3234* ECX3210 MEX3211 MEX3235 MEX3272 MEX3273 MEX3174 MEK3170	MPZ3133* MPZ3234* ECX3210 MEX3211 MEX3235 TTX3239* TTI3241 TTX3231 TTX3232
4	MPZ4131* MPZ4132* AEX4232 AEX4239* AEX4240*	MPZ4131* MPZ4132* CEX4230 CEX4231 CEX4232	MPZ4131* MPZ4132* ECX4150* ECX4235 ECX4236 ECX4247*	MPZ4131* MPZ4132* ECX4150* ECX4234 ECX4236 ECX4248* ECX4252* MEX4243**	MPZ4131* MPZ4132* ECX4150* ECX4230 ECX4233 ECX4236 MEX4243**	MPZ4131* MPZ4132* MEX4275* MEX4276* MEX4233 ECX4236 Min. of two from MEX4230 MEX4135* MEX4232 MEX4142*	MPZ4131* MPZ4132* MEX4271 MEX4272 MEX4273 ECX4236 MEX4243 MEX4335*	MPZ4131* MPZ4132* TTX4260* TTX4232 TTX4233 TTX4238* MEX4243 MEX4276*
5	MPZ5231* AEX5136 Min. of three from AEX5231 AEX5232 AEX5243* AEX5237* AEX5244 MEX5231	MPZ5231* CEX5230 CEX5231 CEX5232 CEX5233	MPZ5231* MPZ5133* ECX5234 ECX5235 ECX5236	MPZ5231* ECX5231 ECX5332 ECX5238	MPZ5231* ECX5233 ECX5234 ECX5243*	MPZ5231* MEX5231 MEX5232 MEX5233 MEX5277*	MPZ5231* MEX5270 MEX5271 MEX5272 MEX5233	MPZ5231* TTX5232 TTX5234 TTX5260 TTM5361 TTX5262*

Schedule 1(b) cont.

Level	Degree specialization							
	Agricultural Engineering	Civil Engineering	Computer Engineering	Electrical Engineering	Electronic and Communication Engineering	Mechanical Engineering	Mechatronics Engineering	Textile and Clothing Engineering
	Higher Diploma Technology Discipline							
	Agricultural Technology	Civil Technology	Computer Technology	Electrical Technology	Electronic and Communication Technology	Mechanical Technology	Mechatronics Technology	Textile and Clothing Technology
6	Courses							
	AEX6244 AEY6595 Min. of two from AEX6235* AEX6240 AEX6236* AEX6241	CEX6230 CEX6331 CEX6332 CEX6233 CEY6595 or CEY6496 or (CEY6197 & CEY6498) & CEY6498)	ECX6151* ECX6235 ECX6236 [ECY6595 or ECY6496 or (ECY6197 & ECY6498)]	ECX6241 ECX6332 [ECY6595 or ECY6496 or (ECY6197 & ECY6498)]	ECX6241 ECX6243* ECX6151* ECX6250* [ECY6595 or ECY6496 or (ECY6197 & ECY6498)]	MEX6240* MEX6278* MEY6595 or MEY6496 or (MEY6197 & MEY6498) Min. of two from MEX6231* MEX6232* MEX6230* MEX6234* MEX6235* MEX6236* MEX6270 MEX6271	MEX6270 MEX6271 MEX6273* MEY6573 or MEY6474	{TTY6595 or TTY6496 or [TTY6197 and TTY6498]}
	Training modules							
	MEW3001 AEW4001 AEW5001	MEW3001 CEW5003	MEW3001 ECW3001 ECW4001 or ECW5001	MEW3001 ECW3001 ECW4002 or ECW5002	MEW3001 ECW3001 ECW4003 or ECW5003	MEW3001 MEW4002 MEW5002	MEW3001 MEW4003 MEW5003	MEW3001 [Any 2 of TTW4001 TTW5003 TTW5004 TTW5005 TTW5006]

**Applicable only for Degree

In place of courses asterisk marked (*) the alternative course/s listed in the following Table shall be considered in satisfying the compulsory list relevant to specializations

Schedule 1(b) cont.

List of Alternative courses

Listed course/s	Alternative
AEX5243	AEX5230 or AEI5243
AEX6234	AEI6234 or AEX6230
AEX6235	AEI6235 or AEX6233
AEX6236	AEI6236 or AEX6231
AEX4239	AEX3230
AEX4240	AEX3232
ECX3150 & ECX4150	ECX3230
ECX4247	ECX4237
ECX4248	ECX4238 & ECX3232
ECX4252	ECX4232 & ECX3232
ECX5243	ECX5239
ECX6243	ECX6333
ECX6250 & ECX6151	ECX6330
ECX6151	ECX5237
MEX3235	MEX3212
MEX3274	ECX3234
MEX4335	MEX3271
MEX4135	MEX4235
MEX4142	MEX4242
MEX4275	MEX3271
MEX4276	MEX3271
MEX5277	MEX4231
MEX6230	MEX6330
MEX6231	MEX6331
MEX6232	MEX6332
MEX6234	MEX6334
MEX6235	MEX6335
MEX6236	MEX6336
MEX6240	MEX6340
MEX6273	MEX6272
MEX6278	MEX5230

Listed course/s	Alternative
TTX3239	TTI3239
TTX3239	TTI3235
TTX4238	TTI4238
TTX4260	TTX3255
TTX5262	TTX4231
MPZ3133	MPZ3132 (for specializations except computer engineering)
MPZ3133	MPZ3132 and MPZ4140 (for computer engineering specialization)
MPZ3234	MPZ3231
MPZ4131 & MPZ4132	MPZ4230
MPZ5231	MPZ5230
MPZ5133	MPZ5140

Schedule 1(c): Excluded combinations

Students may not claim credit for more than one course in each of the following combinations of courses:

AEX4237 and CEX4233	ECX4248 and ECX3232	MEX6240 and MEX6340
CEX5231 and AEX6233	ECX4252 and MEX3272	MEX6270 and MEX6333
ECX3230 and ECX3234	ECX5243 and ECX5239	MEX6273 and MEX6272
ECX3230 and MEX3272	ECX5247 and ECX5237	MEX6273 and ECX6242
ECX3231 and ECX3234	ECX5245 and ECX5240	MEX6278 and MEX5230
ECX3231 and MEX3272	ECX6151 and ECX6330	TTX3239 and TTI3239
ECX3232 and ECX3234	ECX6250 and ECX6330	TTX3239 and TTI3235
ECX3232 and ECX4248	ECX6243 and ECX6333	TTX4238 and TTI4238
ECX3232 and MEX3272	MEX3274 and ECX3234	TTX5262 and TTX4242
ECX3234 and MEX3272	MEX4335 and MEX3271	TTX4260 and TTX3255
ECX3217 and ECX4247	MEX4234 and TTX5234	TTX5262 and TTX4231
ECX3217 and ECX4237	MEX4135 and MEX4235	TTX5136 and TTX6239
ECX3150 and ECX3230	MEX4142 and MEX4242	TTX6263 and TTX5237
ECX3150 and ECX3234	MEX4275 and MEX3271	TTX6162 and TTX6231
ECX3150 and MEX3272	MEX4276 and MEX3271	TTM4239 and MEM5336
ECX4247 and ECX4237	MEX5277 and MEX4231	TTM4239 and TTM5361
ECX4248 and ECX4238	MEX6230 and MEX6330	TTM5361 and MEM5336
ECX4150 and ECX3230	MEX6231 and MEX6331	TTX6264 and TTX5251
ECX4150 and ECX3234	MEX6232 and MEX6332	TTX6260 and TTX4255
ECX4150 and MEX3272	MEX6234 and MEX6334	TTX6261 and TTX4235
ECX4252 and ECX3232	MEX6235 and MEX6335	
ECX4252 and ECX3234	MEX6236 and MEX6336	
ECX4252 and ECX4232		

In a situation, where a student has obtained credits from mutually excluded courses, the following sequence of considerations shall be conducted to decide on which of the course/s is/are to be retained.

1. Retain the one necessary for final credit total
2. Retain the one in the compulsory list where applicable
3. Retain the one that has an impact on the category minimum credit requirements
4. Retain the one that has an impact on minimum level-credit requirements
5. Retain the one with largest GPV – partial inclusion allowed so as to retain maximum credits where credits of the courses are not the same (but not contravene 1, 2, 3 and 4)

Schedule 1(d): Transfer scheme from old course(s) to new course(s)/training module(s)

The course credits of the old curricula are transferred to course credits of the new courses according to the Table given below. If the course credits are not equivalent, an adjustment is made by adding and/or deducting credits as the case may be, at appropriate levels and categories for some courses. This correction is indicated by a code (known as virtual code) beginning with letters “VC” followed by category letter, level and one third of the credit rating. The letter F is used to denote negative credits. In the virtual code F is equal to -1.

The grades of the new courses are determined as given below depending upon the type of conversion as given below.

However, old training course/s shall be converted to relevant training modules/s and such training modules shall be given a “Pass” irrespective of the grade/s of the old training course/s.

Conversion type	Grade of the new course
one to one:	The new course acquires the marks from the old course, and grade is determined accordingly.
One to many:	All new courses are assigned the marks of the old course and grades are determined accordingly.
Many to one:	Credit based weighted average mark is calculated for old courses and allocated to the new course. The grade is determined accordingly.
Many to many:	Credit based weighted average mark is calculated for old courses and assigned to all new courses. The grades are determined accordingly.

The Table below gives the only conversions for the changes effected after 2003/04 academic year. Refer Rules and Regulations for the award of Degree of Bachelor of Technology (Engineering) approved by the council on.....for changes that were effected during 2003/04 academic year.

Old courses	Equivalent course/s or training module/s
Courses offered by the Department of Agricultural and Plantation Engineering	
AEX2130 Nature and environment	AEX3110 Nature and environment
Courses offered by the Department of Electrical and Computer Engineering	
ECK3131 C programming	MEK3170 C programming
ECX2330 Principles of electricity	ECX3210 Electro-techniques
ECX4240 Automotive electronics	MEX4242 Automotive electronics
ECX4242 Control systems	MEX4243 Controls systems engineering
ECX5330 Electronic systems	ECX6330 Electronic systems + VCX5300 + VCX6F00 + VCX6F00 + VCX6F00
ECX6233 Microwave communication systems	ECX6333 Microwave engineering & applications + VCX6F00

Old courses	Equivalent course/s or training module/s
ECY6398 Individual project (Computer, Electrical, Electronic and Communication engineering)	ECY6498 Individual project – Type A
ECW3290 Specific training I (Electronics)	ECW3001 Industrial training I (Electronics)
ECW4291 Specific training II (Software)	ECW4001 Industrial training II (Software)
ECW4292 Specific training II (Power)	ECW4002 Industrial training II (Power)
ECW4293 Specific training II (Communication)	ECW4003 Industrial training II (Communication)
ECW5291 Specific training II (Software-undergraduate)	ECW5001 Industrial training II (Software-undergraduate)
ECW5292 Specific training II (Power-undergraduate)	ECW5002 Industrial training II (Power-undergraduate)
ECW5293 Specific training II (Communication-undergraduate)	ECW5003 Industrial training II (Communication-undergraduate)
Courses offered by the Department of Mathematics and Philosophy of Engineering	
MPZ1330 Pure mathematics	MPZ2310 Pure mathematics
MPZ1331 Applied mathematics	MPZ2311 Applied mathematics
MPZ3230 Engineering mathematics I	MPZ3231 Engineering mathematics IA + MPZ3132 Engineering mathematics IB
MPZ5330 Engineering mathematics III	MPZ5230 Engineering mathematics III + VCZ5100
MPZ6231 Discrete mathematics	for Btech MPZ4140 Discrete mathematics I + MPZ5140 Discrete mathematics II + VCZ6200 + VCZ4F00 + VCZ5F00
MPZ6231 Discrete mathematics	For BSE MPZ4160 Discrete mathematics I + MPZ5160 Discrete mathematics II + VCZ6200 + VCZ4F00 + VCZ5F00
Courses offered by the Department of Mechanical Engineering	
MEK2289 Computer aided drafting	MEK3289 Computer aided drafting
MEW1130+MEW2130	MEW3001 Workshop practice
MEW1130+MEW3102	MEW3001 Workshop practice
MEW2130+MEW3101	MEW3001 Workshop practice
MEW3290 Specific training I (Automobile)	MEW4002 Industrial training I (Mechanical)
MEW3291 Specific training I (Manufacturing)	MEW4002 Industrial training I (Mechanical)
MEW4290 Specific training II (Automobile)	MEW5002 Industrial training II (Mechanical)
MEW4291 Specific training II (Manufacturing)	MEW5002 Industrial training II (Mechanical)
MEX2230 Communicating engineering information	MEX3211 Communicating engineering information
MEX2331 Heat and fluids	MEX3212 Basic thermo-fluids
MEX2132 Design philosophy	MEX3174 Principles of design
MEX3230+MEX3231	MEX3271 Applied mechanics and strength of materials +VCX3200 (for Mechanical Engineering only)

Old courses	Equivalent course/s or training module/s
MEX3231 Strength of materials I	CEX3234 Strength of materials (for Civil Engineering only)
MEX3232 Thermodynamics and fluid mechanics	MEX3235 Thermo – fluids
MEY6398 Individual project (Mechanical engineering)	MEY6498 Individual project – Type A
MEW3101+MEW3102	MEW3001 Workshop practice
MEW3292 Specific training I (Mechanical engineering)	MEW4002 Industrial Training I (Mechanical)
MEW3294 Specific training I (Mechatronics engineering)	MEW4003 Industrial Training I (Mechatronics)
MEW4292 Specific training II (Mechanical engineering)	MEW5002 Industrial Training II (Mechanical)
MEW4294 Specific training II (Mechatronics engineering)	MEW5003 Industrial Training II (Mechatronics)
Courses offered by the Department of Textile and Apparel Technology	
TTX3233 Woven fabric technology	TTX4260 Woven fabric technology
TTX3255 Woven fabric technology	TTX4260 Woven fabric technology
TTX4231 Knitting and non-woven technology	TTX5262 Knitting technology
TTX4235 Yarn manufacture II	TTX6261 Yarn manufacture II
TTX4255 Advanced woven fabric technology	TTX6260 Advanced woven fabric technology
TTX5136 Ergonomics for apparel industry	TTX6239 Ergonomics + VCX6F00 +VCX6F00 + VCX5100
TTX5237 Speciality fabrics	TTX6263 Speciality fabrics
TTX5251 Non-woven textiles	TTX6264 Non-woven textiles
TTX6231 Advanced coloration technology	TTX6162 Advanced coloration
TTW3290 Specific training (Yarn manufacture)	TTW5003 Industrial training (Yarn manufacture)
TTW3291 Specific training (Weaving)	TTW5004 Industrial training (Weaving)
TTW3292 Specific training (Textile chemical processing)	TTW3005 Industrial training (Textile chemical processing)
TTW3293 Specific training (Apparel I)	TTW4001 Industrial training (Apparel I)
Other courses	
FEJ0201 Learning to learn at a distance or FEJ0010 Learning to learn at a distance or FEW3001 Learning to learn at a distance	EDE3001 Empowering for Independent Learning
LSE1201 / LSL1201/ LSL3201/ LSE1304/ LSE1301 English for technology I or LSE2201/ LSL2201/ LSL4201 English for technology Part II	LSE3204 English for General Academic Purpose

Schedule 1(e): Recognized qualifications and credits that can be claimed in different categories to satisfy the admission requirement for the Programme of Study

Qualification	Category		
	A	B	C
(1) Pure mathematics- G.C.E (A/L) Sri Lanka or (2) PAF2201 Combined Mathematics I (OUSL) or (3) MPZ2310 Pure mathematics (OUSL) or (4) MPZ1330 Pure mathematics (OUSL) or (5) MPZ2230 Mathematics (OUSL) or (6) NCIT (Electrical and Electronics)/NCIT (Civil) or (7) Diploma in Civil engineering, GITI	6		
(1) Applied mathematics - G.C.E (A/L) Sri Lanka or (2) PAF2202 Combined Mathematics II (OUSL) or (3) MPZ2311 Applied mathematics (OUSL) or (4) MPZ1331 Applied mathematics (OUSL)	6		
(1) Combined mathematics - G.C.E(A/L) Sri Lanka or (2) Cambridge International AS and A Level – C Pass for Mathematics or (3) Edexcel GCE A Level – C Pass for Mathematics or (4) City and Guilds Advanced Technician Diploma or (5) Diploma in Electronics and Communications-Jaffna College of Technology or	12		
(1) Physics -G.C.E (A/L) Sri Lanka or (2) Cambridge International AS and A Level– a Pass for Physics or (3) Edexcel GCE A Level – a Pass for Physics or (4) PYF2203 Physics I (OUSL) and PYF2204 Physics II (OUSL) or (5) TTX2313 Physics for Technology (OUSL) or		12	
(1) G.C.E (A/L) Chemistry or (2) Cambridge International AS and A Level – 3 passes including a C Pass for Mathematics and a Pass for Physics or (3) Edexcel GCE A Level– 3 passes including C Pass for Mathematics and a Pass for Physics or (4) Cambridge International AS and A Level – C Pass for Chemistry or (5) Edexcel GCE A Level– Pass for Chemistry or (6) G.C.E (A/L) Sri Lanka – Combine mathematics, Physics, and Information Communication Technology or (7) CMF2205 Chemistry I (OUSL) and CMF2206 Chemistry II (OUSL) or (8) CEX2312 Engineering properties materials (OUSL) or (9) CEX1330 Engineering properties materials (OUSL) or (10) NCT (Civil) / NCT (Mechanical) /NCT (Electrical and Electronics) or (11) NCIT (Electrical and Electronics)/NCIT (Civil)/NCIT (Mechanical) or (12) Diploma in Electronics and Communications-Jaffna College of Technology			12

Schedule 2 – Course/training module Exemptions

Exemptions are generally granted from courses and training modules. However, for certain qualifications credits at certain levels and categories of courses are also granted (known as virtual credits). This is denoted by a code beginning with letters ‘VR’.

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

Table 1-Qualifications in English Language

Qualification	Course exempted
GCE(A/L) – Simple pass in General English , or any recognised qualification in Science or Technology/Engineering, at the level of Diploma or Degree, the medium of instruction being English (verification needed)	VRL1201

Table 2 -Qualifications in Agriculture/Biology/Food and related disciplines

Qualification	Courses and Industrial Training modules				
	Level 3		Level 4		Level 5
Diploma in Agriculture –School of Agriculture or Diploma in Agriculture – Aquinas College	AEX3231	AEX3233	AEX4230 AEX4239	AEX4240 AEW4001	
NDT (Agriculture) or, NDA or HNDA – Department of Technical Education and Training	AEX3231	AEX3233	AEX4230 AEX4239 AEX4240	AEM4235 AEW4001	
Diploma in Technology (OUSL) – Agricultural Engineering (any specialisation)	AEX3110 AEX3231 AEX3233 ECX3210	MEX3211 MEX3212 MEW3001 VRX3400	AEX4230 AEX4231 AEX5237 AEX4239	AEX4240 AEW4001 VRM4200 VRJ4100	
Diploma in Animal Husbandry, Sri Lanka, School of Animal Husbandry, Department of Animal Production and Health, Welisara	AEI3234	VRI3200	AEI4238		

Note: Those who have satisfied **only the academic requirements** without industrial training components in NDT (Agriculture) can be granted exemptions as listed, without **trainingmodules** at Levels 3 & 4

Table 3 - Qualifications in Civil engineering and related disciplines

Qualification	Courses and Industrial Training modules		
	Level 3	Level 4	Level 5
NCT (Civil)	CEX3230		
NCIT (Civil)	CEX3230 CEX3231	MEW3001	
NAB (Civil)	ECX3210 MEX3211	MEX3212 MEW3001	
Diploma in Civil Engineering, GITI	CEX3230 CEX3232	CEX3233	
HNDE (Civil)	ECX3210 MEX3211 MEX3212 CEX3230 CEX3231 CEX3232	CEX3233 CEX3234 MPZ3234 MPZ3133 MEW3001 VRX3200	CEW4002
NDET (Civil)	ECX3210 MEX3211 MEX3212 CEX3230 CEX3231 CEX3232	CEX3233 CEX3234 MPZ3234 MPZ3133 MEW3001	CEW4002
NDT (Civil) or NDES (Civil)	ECX3210 MEX3211 MEX3212 CEX3230 CEX3231 CEX3232	CEX3233 CEX3234 MPZ3234 MPZ3133 EW3001 VRX3200	CEW4002
BSc (Civil Engineering), General Sir John Kothalawala Defence Academy	ECX3210 MEX3211 MEX3212 CEX3230 CEX3231	CEX3232 CEX3233 CEX3234 MEW3001	CEX4230 CEX4231 CEX4332 CEX4234 CEX4236
BSc (Surveying Science), Institute of Surveying & Mapping, Diyatalawa	MPZ3234 MPZ3133	ECX3210 CEX3233	CEX5230
BSc. Surveying Sciences, Sabaragamuwa University Sri Lanka	MPZ3234 MPZ3133	ECX3210 CEX3233	CEX5230
Graduate Diploma, Engineering Council UK (Civil Engineering)	CEX3230		

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 **trainingmodules** at Levels 3 & 4

Table 4 - Qualifications in Electrical/Electronic/Communications/ Computer Engineering/ IT and related disciplines

Qualification	Courses and Industrial Training modules		
	Level 3 (and 4)	Level 4	Level 5
NCT (Electrical and Electronics)	ECX3210		
NCIT (Electrical and Electronics)	ECX3210 ECX3232 ECX3231 ECX3233 MEW3001 [(ECX3150 & ECX4150)or MEX3272]		
NAB Special Apprentice (AIT) – Electrical/Electronic	ECX3210 ECW3001 MEW3001 (ECX3150 & ECX4150) or MEX3272		
Diploma in Electronics and Communications, Jaffna College Institute of Technology	MEX3211 ECX3232 ECX3210 ECX3233 ECX3231 (ECX3150 & ECX4150) or MEX3272		
Diploma in Computer System Design, (NIBM)	ECX3233	ECX4235 ECX4247 ECX4262	
Advanced Technician Diploma in ElectricalandElectronic Engineering (Level 5 IVQ)	ECX3210		
Higher Diploma in Computer based Information Systems (NIBM)			ECX5245 ECX5247 ECX5267
Higher National Diploma in IT, Advanced Technological Institute	ECX3233	ECX4235 ECX4247	
NDT (Electrical) or NDES (Power) or HNDE (Electrical Power)	ECX3210 ECX3231 MEX3211 MPZ3234 MEX3212 MPZ3133 MEX3235 MEW3001 MEX3174 VRX3200 (ECX3150 & ECX4150) or MEX3272 ECX3232 or (ECX4252 & ECX4248) ECW3001or MEW4003,	ECW4002	
National Diploma in Technology (NDT) – Electronics and Telecommunications with DEE206 Electrical Installations & Wiring Diagrams		ECX4234	

Table 4 Cont.

Qualification	Courses and Industrial Training modules		
	Level 3 (and 4)	Level 4	Level 5
NDES* (Power) (New curriculum) NDT** (Electrical) (New curriculum)	ECX3210 ECX3231 MEX3211 ECX3233 MEX3212 MPZ3234 MEX3235 MPZ3133 MEX3174 MEW3001 (ECX3150 & ECX4150) or MEX3272 ECX3232 or (ECX4252 & ECX4248) ECW3001 or MEW4003	ECX4234 ECX4236 ECW4002	
NDT (Electronic & telecom.) or NDES (Electronics) or NDES (Telecommunication)	ECX3210 ECX3232 MEX3211 ECX3233 MEX3212 MPZ3234 MEX3174 MPZ3133 ECX3231 MEW3001 (ECX3150 & ECX4150) or MEX3272 ECW3001 or MEW4003	ECX4233 ECX4236 ECW4003	
NDES* (Electronics) or NDES *(Telecommunication) (New curriculum)	ECX3210 ECX3232 MEX3211 ECX3233 MEX3212 MPZ3234 MEX3174 MPZ3133 ECX3231 MEW3001 (ECX3150 & ECX4150) or MEX3272 ECW3001 or MEW4003	ECX4230 ECX4233 ECX4236 ECW4003 VRX4200	
HNDE (Electronics)	ECX3210 MPZ3133 MEX3211 MEW3001 MEX3212 ECX3231 ECX3233 VRX3200 MPZ3234 (ECX3150 & ECX4150) or MEX3272 ECW3001 or MEW4003	ECX4233 ECW4003 VRX4200	
National Diploma in Engineering Technology (NDET)- Electrical/Electronic	ECX3210 ECX3233 MEX3211 MEW3001 MEX3212 VRX3200 MPZ3234 (ECX3150 & ECX4150) or MEX3272		
BIT (University of Colombo)		ECX4235 ECX4247	

*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 **trainingmodules** at Levels 3 and 4

Table 5 - Qualifications in Mechanical/Automobile/Manufacturing/Marine/Aeronautical/ Nautical/Chemical engineering and related disciplines

Qualification	Courses and Industrial Training modules		
	Level 3	Level 4	Level 5
German Training School- Full Certificate or Full Certificate of Basic Training Programme conducted by the Training Schools of Central Transport Board (Werahara/Borella)	MEW3001		
National Certificate for Industrial Technicians (NCIT) (Mechanical)	MEX3211 MEX3212 MEX3233	MEX3234 MEW3001	
NDT (Mechanical)	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133, MEW3001	MEX4230 MEX4232 (MEX4275 & MEX4276 or MEX4335) MEW4002 or MEW4003
NDT (Chemical)	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335)
NDT (Marine)	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335)
NDT (Nautical studies & technology)	MEX3211 MEX3212	ECX3210 MEW3001	(MEX4275 & MEX4276 or MEX4335)
NDES (Mechanical - General)	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335) MEX4230
HNDE (Mechanical)-Production Engineering	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335) MEX4230 MEW4002 or MEW4003
HNDE (Mechanical)-Automobile Engineering	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335) MEX4232 MEW4002 or MEW4003

Table 5 Cont.

Qualification	Courses and Industrial Training modules			
	Level 3		Level 4	Level 5
HNDE (Mechanical)-Refrigeration and Air conditioning	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335) MEW4002 or MEW4003	MEW5002
NDES (Automobile)	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234 MEX3235	MEX3274 MEX4232 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335) MEW4002 or MEW4003	MEW5002
NDES (Marine)	MEX3211 MEX3212 ECX3210 MEX3233 MEX3234	MEX3235 MEX3274 MPZ3234 MPZ3133 MEW3001	(MEX4275 & MEX4276 or MEX4335)	
BSc (Defence studies) in Aeronautical Engineering	ECX3210 MEX3211 MEX3212	MPZ3234 MPZ3133 MEW3001	(ECX3150 & ECX4150 or MEX3272)	

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

Table 6 - Qualifications in Textile/Apparel technology and related disciplines

Qualification	Courses and Industrial Training modules exempted		
	Level 3 (and 4)	Level 4 (and 5)	Level 5 (and 6)
Certificate in Textile Technology (One year Fulltime), Textile Training & Services Centre, Ratmalana	TTX3231 TTX3232	TTX4232 VRM4100 TTX4260	
Certificate in Textile Technology (One year Fulltime) and Diploma in Technology (Extension Course), Textile Training & Services Centre, Ratmalana	TTX3231 TTX3232 TTX3239	TTX4232 VRM4100 TX4260	
Certificate in Textile Dyeing and Printing (Part time) from the Textile Training and Services Centre, Ratmalana	TTX4232		
Diploma in Textile and Apparel Technology (Part time) , Sri Lanka Institute of Textile and Apparel (SLITA), Rathmalana	TTX4232		
Diploma in Textile and Apparel Technology (Full time) , Sri Lanka Institute of Textile and Apparel (SLITA), Ratmalana	TTX3231 TTX3239 TTX3232 TTI3241 TTI3236	TTX4232 TTX4233 TTX4238	TTX5260
Diploma in Textile Technology from the Textile Training and Services Centre, Ratmalana	TTX3231 TTX3232 TTX3239	TTX4232 VRM4100 TTX4260	
Diploma in Clothing Technology from the Clothing Industry Training Institute, Ratmalana	TTX3239 TTI3241	TTX4233 TTW4001 VRM4100	TTX5260
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	TTX3231 VRM4100	TTX4232	TTX6162
Certificate in Garment Production Management (Part time) from Clothing Industry Training Institute, Ratmalana	TTX3239		
College Diploma in Clothing Technology and Management (Fulltime), Brandix College of Clothing Technology, Ratmalana	TTI3236 TTX3239 TTI3241	TTX4233 TTW4001 TTX4238	TTX5260
NDT (Textile) (Old Curriculum-till 2007)	MEX3211 MPZ3234 MEX3235 MPZ3133 MEX3174 TTX3231 ECX3210 TTX3232 TTX3232 (TTI3236 or TTX3239), MEW3001	TTX4232 TTX4233 TTX4260	Any two of TTW5003, TTW5004, TTW5005, TTW5006

Table 6 Cont.

Qualification	Courses and Industrial Training modules exempted				
	Level 3 (and 4)		Level 4 (and 5)		Level 5 (and 6)
NDT (Textile) (Old Curriculum-till 2007) without completion of training	MEX3211 MEX3235 MEX3174 ECX3210 (TTI3236 or TTX3239)	MPZ3234 MPZ3133 TTX3231	TTX4232 TTX4233 TTX4260		
NDT (Clothing) (Old Curriculum-till 2007)	MEX3211 MEX3235 MEX3174 ECX3210 MPZ3234 (TTI3236 or TTX3239)	MPZ3133 TTX3231 TTX3232 TTI3241 MEW3001	TTX4232 TTX4233 TTX4238	Any two of TTW4001 TTW5003 TTW5004 TTW5005 TTW5006	TTX5260
NDT (Clothing) (Old Curriculum-till 2007) without completion of training	MEX3211 MEX3235 MEX3174 ECX3210 (TTI3236 or TTX3239)	MPZ3234 MPZ3133 TTX3231 TTI3241	TTX4232 TTX4233 TTX4238		TTX5260
NDT(Textile and Clothing Technology) – New Curriculum(after 2007)	MEX3211 MEX3235 ECX3210 MPZ3234 MPZ3133	TTX3231 TTX3232 TTI3236 TTX3239 TTI3241 MEW3001	TTX4232 TTX4233 TTX4238 TTX4260 MEX4276	Any two of TTW4001 TTW5003 TTW5004 TTW5005 TTW5006	TTX5260,
NDT(Textile and Clothing Technology) – New Curriculum(after 2007) without completion of training	MEX3211 MEX3235 ECX3210 MPZ3234 MPZ3133	TTX3231 TTX3232 TTI3236 TTX3239 TTI3241	MEX4276 TTX4260 TTX4232 TTX4233 TTX4238		TTX5260
NDT (Polymer Technology)	MEX3211 MEX3235 MEX3233 MEX3234 MEX3235	MEX3174 ECX3210 MPZ3234 MPZ3133 MEW3001	MEX4276		
Diploma in Clothing Manufacture – CITI, Ratmalana	TTX3239 TTI3241		TTX4233 TTW4001	VRM4100	TTW5001
Diploma in Polymer Technology – CITI, Ratmalana			TTX4233 VRM4100		
TTM4239 –Management studies and TTM5240 -Apparel Merchandising, OUSL					TTM5361
TTI3240- Pattern construction and TTI5238 – Advanced pattern construction, OUSL					TTX5260

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	TTX3231		
Paper 3 in LTI /Paper 2 (b) in ATI – Yarn Technology and Yarn preparation		TTX3232	
Paper 4 in LTI /Paper 2 (c) in ATI- Fabric technology	TTI3236	TTX4260	
Paper 5 in LTI /Paper 2 (d) in ATI-Dyeing and Finishing Technology		TTX4232	
Paper 6 in LTI – Textile Testing		TTX4233	
Paper 8 in LTI /Paper 2 (f) in ATI- Management Studies		VRM4200	
Paper 10 in LTI- Merchandising of Textile Consumer Products		VRM4100	
Paper 11 in LTI – Garment Technology	TTX3239		

Note: Those who have satisfied **only the academic requirements** without industrial training components in NDT(Textile and Clothing Technology) – New Curriculum, NDT (Textile) (Old Curriculum), and NDT (Clothing), (Old Curriculum) can be granted exemptions as listed, but without relevant **Industrial training** modules at Levels 3 and 4

Other qualifications

Qualification	Courses and Industrial Training modules exempted		
	Level 3	Level 4	Level 5&6
*BSc Eng (Peradeniya / Moratuwa), *Any other Academic Qualification fulfilling the admission requirement to Associate Membership of IESL	MPZ3234 MPZ3133	MPZ4131 MPZ4132	MPZ5231 MEM5336 VRJ6100
*In addition to listed courses, compulsory courses at levels 3 and 4 in the relevant field shall be granted If the specialisation different to his BSc specialisation, the student has to register for at least 18 credits of courses from Levels 3 and 4 as recommended by the Head of Department			
BSc with Physics at the final year	ECX3210 MEX3212 ECX3150 ECX3231	ECX4150	
**BSc with Mathematic at the final year **BSc with Applied Mathematics AND Pure Mathematics at the final year **BSc Special Degree in Pure Mathematics or Applied Mathematics **BSc Eng (Peradeniya / Moratuwa) – Part I **IESL or EC (London) – Part I	MPZ3234 MPZ3133		
OUSL Faculty of Natural Science –Pass in CSU3276			MPZ5133
Engineering Council Examination – Part2B 300 – The Engineer in Society			MPJ5233

** Only exemptions from mathematic category courses are listed. Exemptions from other courses may be granted after evaluation of subjects on the request of students.

Schedule 3: Fees

The Fees payable in respect of the Programme of Study shall be determined by the Council and will comprise,

- Registration fee
- Tuition fee
- Supplementary fee
- Library fee
- Exemption fee

The tuition fee for each year of the Programme of Study shall be payable in two instalments.

All other fees shall be payable at Registration or as determined by the Council.