

UNIVERSITY OF VOCATIONAL TECHNOLOGY

# **PROSPECTUS** 2018-2019

# PROSPECTUS 2016-2017



# Life Long Learning for all

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#### ABBREVIATIONS

Short form	Elaboration
UNIVOTEC	University of Vocational Technology
HOD	Head of the Department
IIESL	Institution of Incorporated Engineers Sri Lanka
IESL	The Institution of Engineers Sri Lanka
OUSL	Open University of Sri Lanka
FIVT	Faculty of Industrial and Vocational Technology
FTT	Faculty of Training Technology
TVEC	Tertiary and Vocational Education Commission
DTET	Department of Technical Education and Training
QA&A	Quality Assurance and Accreditation
NVQ	National Vocational Qualification
HNDE	Higher National Diploma in Engineering
NDT	National Diploma in Technology
NDES	National Diploma in Engineering Sciences
NDICT	National Diploma in Information and Communication Technology
TVET	Technical and Vocational Education and Training
B.Ed(Tech)	Bachelor of Education in Technology
B.Ed(Tech)ELT	Bachelor of Education in Technology - English Language Teaching
NIE	National Institute of Education
SLIATE	Sri Lanka Institute of Advanced Technological Education
NDTT(ELT)	National Diploma in Training Technology (English Language Teaching)
NITESL	National Institute of Technical Education of Sri Lanka
ICT	Information and Communication Technology
ELT	English Language Teaching
T/L	Teaching/ Learning
CoT	College of Technology
NDET	National Diploma in Engineering Technology
NET	.NET Framework
CAD/CAM	Computer- Aided Design/ Computer- Aided Manufacturing
HVAC	Heating, Ventilating, and Air Conditioning
3D	Three Dimensional
PLC	Programmable Logic Controller
IT	Information Technology
2D	Two Dimensional
AV	Audio Visual
NAITA	National Apprentice and Industrial Training Authority
VTA	Vocational Training Authority
NIBM	National Institute of Business Management
NYSC	National Youth Services Council
CGTTI	Ceylon German Technical Training Institute
NGO	Non- Government Organization

The weightage of the degree programs is calculated under European Credit Transfer System .



#### **Establishment of the University of Vocational Technology**

The National University System in Sri Lanka, from its inception, has been providing opportunities of higher education for a significantly small percentage of coherent groups of students annually. Accordingly a large number of students don't get of any opportunities for further studies. Although some of these dropouts enrolled in occupation oriented technical and vocational education programmes, it had not been popular among the coherent group since the technical and vocational education structure had no clear path for further education and training. The University of Vocational Technology was established as the solution for the aforementioned problem. It has also fulfilled the long waited need of the contemporary society for having a University distinct from other existing universities in Sri Lanka where potential students can be enrolled outside the G.C.E Advanced Level route. This University was established under the Parliament Act No. 31 of 2008 as the first ever University in Sri Lanka established for further and higher studies in the Technical and Vocational Education sector.

## VISION

To be the leading University providing Technical and Vocational Education for all with aspiration to achieve professional excellence

### MISSION

- To provide services in human resources development, curriculum development, learning resources development, research and consultancy.
- \* To achieve professional excellence with ethical rectitude.
- To liaise with global TVET sector, academic community and industry.

#### VALUES

University of Vocational Technology values expressed below are embedded in the strategies and principles of how the University executes its services.

- Academic Excellence Core Value of University of Vocational Technology is academic excellence. It promotes acquisition, generation and sharing of knowledge, academic freedom, creativity and innovation in all its activities.
- Integrity University of Vocational Technology promotes openness, transparency and honesty in all its activities.
- Inclusiveness University of Vocational Technology is committed to provide accessible, high quality educational programmes and services to the stakeholders by maintaining diversity, equal opportunities and access.
- Professionalism University of Vocational Technology provides effective and efficient customer focused services in all aspects of its work (internally and externally). The University promotes teamwork, mutual respect and ethical behavior in executing its services.



Integrity



Inclusiveness



#### OBJECTIVES

- (a) Assist in the progressive development of students in technical and vocational education and training system, based on their aptitudes and abilities to acquire a university education;
- (b) Provide pedagogical training for those undergoing training while serving in the Technical and Vocational Education sector and industry;
- (c) Assist in the development of course curricula for Technical and Vocational Education and Training;
- (d) Provide courses of study for middle level technical personnel having qualifications acceptable for admission to the University;
- (e) Provide courses of study for those with National Vocational Qualifications to upgrade their competency and acquire academic qualifications;
- (f) Provide extension courses on continuous professional development;
- (g) Provide extension services to the public including institutions, in the construction, manufacturing and service sectors.

National Vocational Qualification (NVQ) frame work has come into operation before instituting the University of Vocational Technology, introducing NVQ levels I to 4 (Certificate level) and 5 to 6 (Diploma level). With the establishment of this University, it completes the pathway up to NVQ level 7 which is the degree level. Hence, prospective diploma holders coming through pathways of either NVQ or Non NVQ are now having the opportunity to be graduated in technology streams at the University of Vocational Technology.

Nevertheless, it is important to note that the NVQ frame work has now been rationalized with the Sri Lanka Qualification (SLQ) frame work introduced by the University Grants Commission where degree levels of both are made equivalent to each other.



## NVQ PATHWAY TO DEGREE



## POWERS OF THE UNIVERSITY

The University shall subject to the provisions of the parliamentary act No. 31 of 2008, have the powers to;

- (a) Admit students and provide instructions in any approved branch of Technical and Vocational Education and Training as the University may determine;
- (b) Make available opportunities for research and for the advancement and dissemination of knowledge;
- (c) Hold examinations and assess student performance;
- (d) Grant and confer degrees and other academic distinctions in conformity with any statute made for the purpose;
- (e) Establish specialized institute or schools;
- (f) Co-operate by way of exchange of teachers, students and scholars or otherwise with other institutions in Sri Lanka or institutions abroad, having objects or interests similar to or substantially similar to those of the University;
- (g) Make arrangements for the conduct of examinations for enabling those not instructed at the University to obtain degrees, diplomas and certificates from the University and to determine the courses of instruction for such examinations;
- (h) Provide facilities for higher education to persons employed by the University;
- Confer honorary degrees or other distinctions on persons approved by the Academic Council and the Board, in conformity with any Statue made for the purpose;
- (j) Recognize examinations passed and periods of learning pursued at any University established or deemed to be established under the Universities Act, No.16 of 1978 and any higher educational institutions and technical and vocational or professional institutions of the state, within Sri Lanka, for the purpose of admitting students to the University, as approved by the Admission, Accreditation and Quality Assurance Council and the Academic Council;
- (k) Erect, equip and maintain for the purposes of the University, libraries, laboratories and other buildings for instructional purposes;
- Institute Senior Professorships, Professorships, Associate Professorships, Senior Lectureships, Lectureships,
   Assistant Lectureships and other non-academic posts, as may be required for the purposes of the University;
- (m) Institute and award fellowships, scholarships, exhibitions, bursaries, medals and other prizes in conformity with any statute a made for the purpose;
- (n) Charge fees for any extension services provided to the public or any institution, as the case may be, and disburse the income so generated for the attainment of the objects of the University, in such manner as shall be prescribed by any Ordinance, and
- (o) Do all such other acts or things as may be necessary for effectively exercising any of the powers conferred by this Act and for the attainment of the objectives

## **ORGANIZATIONAL STRUCTURE**



#### **BOARD OF GOVERNORS**

Prof. G. L. D. Wickramasinghe - Vice Chancellor , Chairman, Board of Governors, UoVT Mr. P. Ranepura - Secretary, Ministry of Skills Development and Vocational Training Mr. D. C. Dissananayake - Secretary, Ministry of Higher Education and Highways Dr. D. D. D. Suraweera - Dean, Faculty of Industrial & Vocational Technology, UoVT Mr. L. W. S. Kularatne - Dean, Faculty of Training Technology, UoVT Mr. C. Jayasuriya - Additional Director General, Department of Trade & Investment Policy, Ministry of Finance Dr.(Eng.) Lional Pinto - Chairman, Vocational Training Authority of Sri Lanka Ms. P. N. K. Malalasekara - Director General, Department of Technical Education & Training Mr. Shehan Senewirathna - Chairman, National Apprentice & Industrial Training Authority Dr. J. T. Niranjan Ariyasinghe - No:127/3, Kotd Road, Borella Mr. Rahula Senanayake - Tech City Development project, Ministry of Mega oils and Western Development Mr. S. Kulasinghe - Epitaha Waththa, Hiyare, Galle Ms. Rifha Musthafha - Attorney at Law No:206/1, Lake Drive, Colombo 08 Mr. L. R. V. Vaidyarathne - No:76, Dharmapala Road, Colombo 07 Eng. J. K. Lankathilaka - Consultant Engineer, Institution of Incorporated Engineers Sri Lanka (IESL) Mr. Jayavilal Meegoda - President, Institution of Engineers SL Mr. Chandrarathna Withanage - Senior Assistant Secretary General, The Ceylon Chamber of Commerce

#### **Academic Council Nominees**

Ms. T. K. Malwatta - Senior Lecturer, Faculty of Training Technology, UoVT Ms. Malkanthi Thenabadu - Lecturer (Prob.), Faculty of Industrial & Vocational Technology, UoVT

#### Secretary

Ms. Nilmini Diyabedanage - Director General, Secretary, Board of Governors, UoVT

## Chancellor

VIDYA JYOTHI EMERITUS PROFESSOR DAYANTHA S. WIJEYSEKARA UNIVERSITY OF VOCATIONAL TECHNOLOGY



#### Officers of the University

Prof. G. L. D. Wickramasinghe - Vice Chancellor
Ms. N. Diyabedanage - Director General
Dr. D. D. Suraweera - Dean, Faculty of Industrial & Vocational Technology
Mr. L. W. S. Kularatne - Dean, Faculty of Training Technology
Eng. D. S. Hettiarachchi - Director, Media & Information Services
Mr. S. A. Liyanage - Director, Admission Accreditation and Quality Assurance
Ms. A. P. Aluthge - Director, Finance

Prof. G.L.D Wickramasinghe - Vice Chancellor, University of Vocational Technology (Chairman) Mrs. N. Diyabedanage - Director General, University of Vocational Technology Dr. D.D.D. Suraweera - Dean , Faculty of Industrial & Vocational Technology, UOVT Mr.L.W.S.Kularatne - Dean, Faculty of Training Technology, UOVT Eng. D.S.Hettiarachchi - Director, Media & Information Services, UOVT Mr. S.A Liyanage - Director , Admission Accreditation & Quality Assurance, UOVT Miss .Padmashanthi Y. Gamage - Head, Department of Education & Training/ FTT Eng. (Mrs)W.C.C.Sumathiratne - Head, Department of Building Services Technology / FIVT Eng. (Mrs.)J.K.Kanthi - Head, Construction Technology /FIVT Eng. S.P.A.R.S. Jayathilaka - Head, Department of Electrical & Electronics Technology/FIVT Mrs. T.K Malwatta - Head, Department of ICT/ FTT Mr. Senesh Dissanaike Bandara - Head, Department of Film & Television Technology /FIVT Eng. (Mrs.)Gayanthi Alahapperuma - Head, Department of Manufacturing Technology/FIVT Mrs. M. Thenabadu - Head, Department of Agriculture & Food Technology/FIVT Mrs. B.M.T.D Jayasekara - Head, Department of Management Studies/FTT Miss. Buddhima Karunaratne - Head, Department of Language Studies /FTT Dr. A.S.K Warahena - Senior Lecturer, Department of Manufacturing Technology /FIVT Dr. R.L.W Koggalage - Senior Lecturer, Department of Electrical & Electronics Technology/FIVT Dr. A.M Jazeel - Senior Lecturer, Department of Education & Training /FTT Mrs. Beate Breitwiser - Senior Lecturer, Department of Building Services Technology /FIVT Mr. W.G Ananda - Senior Lecturer, Department of Language Studies /FTT

#### External Members

Prof. (Ms.) G. I. C. Gunawardena - Emeritus Professor in Education/Open University of Sri Lanka Eng. P. D. Sarath Chandra - Former Senior Lecturer Mechanical Eng./ HOD Agricultural & Plantation Engineering Open University of Sri Lanka

# ADMISSION ACCREDITATION AND QUALITY ASSURANCE COUNCIL

Dr. S. D. R. Perera, Director General, TVEC
Mr. J.A. Ranjith, Director General, DTET
Ms. Nilmini Diyabedanage, Director General
Mr. L. W. S. Kularathne, Dean, FTT
Mr. D. D. D. Suraweera, Dean FIVT
Mr. S. A. Liyanage , Director, Admission Accreditation and Quality Assurance
Ms. Apsara Caldera, Director, Skills Development, Ministry of Skills Development & Vocational Training
Eng. Jayantha Kumara Lankathilaka, Institution of Incorporated Engineers, Sri Lanka (IESL)
Mr. Vajira Perera, Director, (NVQ), TVEC
Mr. S. U. K. Rubasinghe, Acting Director, (QA & A), TVEC

#### Academic Council Nominee

Ms. M. Thenabadu - Head, Department of Agriculture & Food Technology, FIVT

## FACULTIES & DEPARTMENTS

#### **Faculty of Training Technology**

Faculty of Training Technology has been established to create opportunities for higher studies in the fields of Teacher Education, Information and Communication Technology and Management. All degree courses conducted by the faculty are designed with the intention of opening pathways for middle level technicians and trainers in order to develop their knowledge, skills and attitudes to a higher level. At presents the faculty conducts six degree programmes for diploma holders, TVET trainers and school Teachers qualified in relevant fields.

- Education and Training
- Language Studies
- Information & Communication Technology
- Management Studies



## Faculty of Training Technology



Department of Education and Training Department of Language Studies Department of Information & Communication Technology Department of Management Studies





#### **Faculty of Training Technology**

Following degree programmes are offered by the Faculty of Training Technology. Faculty conducts three ICT degree programmes, two Education degree programmes and one Management degree programme.

- B. Tech in Network Technology
- B. Tech in Web and Multimedia Technology

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- B. Tech in Software Technology
- B. Ed in Technology
- B. Ed in English Language Teaching
- B. Tech in Industrial Management

#### **FACULTIES & DEPARTMENTS**

**Faculty of Industrial and Vocational Technology** 

# DTEC

This faculty of the University was established with the intention of opening pathways for middle level technically trained individuals serving in the industry to develop their knowledge, skills and attitudes for their career advancement. There had been little or no opportunities in the country for those technically trained persons to obtain degrees and higher level qualifications in their respective fields.



## Faculty of Industrial and Vocational Technology

#### The Faculty consists of the following Academic Departments

- Manufacturing Technology
- Constriction Technology
- Building Services Technology
- Electrical & Electronics Technology
- Agriculture and Food Technology
- Film & Television Production Technology

#### Faculty of Industrial and Vocational Technology

Following degree programmes that are offered by the Faculty of Industrial and Vocational Technology would fill this gap and create more openings for higher studies.

- B. Tech in Building Services Technology
- B. Tech in Manufacturing Technology
- B. Tech in Mechatronics Technology
- B. Tech in Food Processing Technology
- B. Tech in Film and Television Production Technology
- B. Tech in Construction Technology and Resource Management
- B. Tech in Quantity Surveying



## **DEGREE PROGRAMMES**

- Bachelor of Education in Technology
- Bachelor of Education in English Language Teaching
- Bachelor of Technology in Software Technology
- Bachelor of Technology in Multimedia and Web Technology
- Bachelor of Technology in Network Technology
- Bachelor of Technology in Mechatronics Technology
- Bachelor of Technology in Building Services Technology
- Bachelor of Technology in Manufacturing Technology
- Bachelor of Technology in Food Process Technology
- Bachelor of Technology in Industrial Management Technology
- Bachelor of Technology in Film and Television Production Technology
- Bachelor of Technology in Quantity Surveying
- Bachelor of Technology in Construction Technology and Resource Management



# Bachelor of Education in Technology Degrees

Introduction of the Degree

Bachelor of Education in Technology degree is focused on the teacher training requirements of the technical instructors and lecturers. This degree is designed to enhance the skills, Attitudes & knowledge of technical teachers on their respective subject areas and Education subjects like Education Psychology, Education Assessment and Measurements as well.

This degree is three years duration. Students are required to do 50% of Technology modules in their Technology area before they follow their educational modules. The main focus of this degree is to strengthen the technical teachers in teaching methodologies with latest technology available in the field of Education.

#### **Entry Qualifications**

#### **Diploma specialization for entry**

Mechatronics, Electrical, Electronics, Mechanical, Production, Automobile, Bio-Medical, Construction, Civil, Refrigeration & Air Conditioning, Electrical & Quantity Surveying, Welding, & Farm Machinery, Food, Agriculture, Culinary Arts, Livestock & Dairy Products, Information & Communication Technology, Television & Film Production, Telecommunication

- I. NVQ level 5 qualifications in the relevant technology area or
- ii. HNDE, NDT, NDES, NDICT in the relevant technology area or equivalent and acceptable to the Academic Council of UoVT

or

- iii. Any other qualification which the TVEC has accepted as deemed to be to NVQ level 5 or 6 [the candidate has to submit written documentation issued by TVEC as evidence with the application]
   or
- iv. Diploma offered by National Institute of Education at Colleges of Education in relevant field acceptable to the Academic Council of UoVT

Preference will be given to those applicants with post diploma industrial/teaching experience of at least I year duration.

or

Qualified A/L Streams - (Commerce, Physical Science, Engineering Technology, Biological Sciences & Bio – Systems Technology) (Only for weekday)

#### Semester 01

Module Code	Module	Credit
TT10102	Evolution of TVET	02
TT10208	Basic Instructional Media	08
TT10310	Teaching – Learning Methods I	10
TT10408	Assessment of Learning	08
	Total	28

Semester 02

Module Code	Module	Credit
TT20110	Advanced Instructional Media	10
TT20208	Teaching – Learning Methods II	08
TT20306	Curriculum Planning, Design & Development	06
TT20406	Research Methodology	06
TT20502	Theme Papers	02
Total		32

#### Semester 03

Module Code	Module	Credit
TT30106	Curriculum Implementation, Monitoring & Evaluation	06
TT30204	Project Management	04
TT30308	Educational Management	08
TT30404	Professional Development	04
TT30508	Internship	08
	Total	30

#### Semester 04 Information and Communication Technology

Module Code	Modules	Credit
ICTCO10102	Engineering Mathematics	02
ICTCO10203	Computer Architecture & Operating System	03
ICTCO10306	Object-Oriented Programming with C++ and Java	06
ICTCO10404	Software Development practices	04
ICTCO10504	Computer Networks	04
ICT CO10603	Database Analysis and Design	03
ICTCO10704	Internet Technologies	04
ICTCO10804	Web Technology & Applications	04
	Total	30

#### Semester 04

Mechatronics

Module Code	Module	Credits
EET10104	Engineering Mathematics I	04
EET10204	Thermodynamics	04
EET10304	Engineering Mechanics	04
EET10404	Mechanics of materials	04
EET10504	Fundamentals of Digital electronics	04
EET10604	Modeling and Simulation	04
EET10706	Engineering Drawing	06
-	Total	30

#### Semester 04 Building Services

Module	Module	Credits
Code	Module	creats
CT40106	Electrical Installation Technology	06
CT40205	Ancillary Services in Buildings I	05
CT40203	Ancillary Services in Buildings II	03
CT40306	Energy Management in Buildings	06
CT40404	Construction Planning & Control	04
CT40506	Measurements in Building Services	06
CT20604	Architectural Aspects of Building Services	04
	Total	34

#### Semester 05

#### Information and Communication Technology

Module Code	Module	Credit
ICTCO50104	Programming in .Net	04
ICTCO50204	Software Architecture & Design	06
ICTCO50302	Data Structures and Algorithms	02
ICTCO50404	Network Administration	04
ICTCO50504	Database Programming	04
ICTCO50604	Database Management Systems	04
ICTCO50702	Enterprise Technologies and Architectures	02
ICTCO50804	Advanced .Net Programming	04
	Total	30

#### Semester 05 Mechatronics

Module Code	Module	Credits
EET20104	Engineering Mathematics II	04
EET20204	Pneumatic and hydraulic Systems	04
EET20306	Electrical Machines and drives	06
EET20404	Sensors and Actuators	04
EET20504	Machine Design	04
EET20608	PLC Programming	08
	Total	30

Semester 05 Building Services

Module Code	Module	Credits
CT30406	Installation of Piped Service in Buildings (L)	04
SM50480	Engineering Mathematics	04
CT30506	Industrial Economics & Management	04
CT30104	Lighting Systems in Buildings	04
CT30304	Building Acoustics	04
CT10404	Building Environment & Human Comfort	04
CT30206	HVAC Systems	06
	Total	30

Semester 06

**Education Module** 

Module Code	Module	Credit
TT60115	Industry Placement	15
TT60215	Project	15
	Total	30



# Bachelor of Education in English Language Teaching

Introduction of the Degree

The ELT Course is a curriculum with both theoretical and practical training for students. It includes ten hours of theoretical lectures as well as eight hours of practice sessions per week. The former provides insights in to the results of past and current research in to the theoretical foundations of learning and teaching English as a second language, whereas the latter improves their application in the language classroom. Moreover, the practice at a participating institute, under the supervision of a senior teacher and university supervisor.

To put it simply, students must be theoretically and practically prepared for what awaits them one day when they take up the teaching profession, and most of them are willing, having this fact in mind and also the ever increasing need for highly qualified teachers who would meet the standards of a changing society, due attention should be paid to the practical component, for therein lies a rich mine of expertise which should be drawn upon during the initial professional education of each new generation of teachers.

In order to familiarize students with the qualities good teachers possess, and teach them to conduct their classroom teaching with flexibility and effectiveness, the B.Ed (Tech) ELT course should be based on the innovations in the field of ELT Methodology and on the needs of the students, thus covering a broad range of activities and tasks arising from personal and vicarious experience in teaching. These issues assume even greater importance today due to the ongoing process of educational reforms and the necessity to promote high standards in education in general.

#### **Entry Qualifications**

- I. National Diploma in Teaching (English) offered by NIE at Colleges of Education **or**
- ii. Higher national Diploma in English offered by SLATE
  - or
- iii. NDTT(ELT) offered by NITESL/UoVT

#### or

iv. English Trained Teacher's Certificate of Ministry of Education

#### and

Two years of teaching experience in a government school or recognized institute after obtaining the qualification and acceptable to the Academic Council of UoVT.

#### Semester 01

Module Code	Module	Credit
LS10401	Academic Reading and Writing Skills	04
LS10602	Introduction to Literature	06
LS10603	Business & Professional Communication Skills	06
TT10804	Evolution of Education	04
TT10405	Educational Psychology	04
TT10606	Basic Instructional Media	06
Total		30

#### Semester 02

Module Code	Module	Credit
LS20601	Introduction to Linguistics	06
LS20602	Computer Assisted Language Learning	06
LS20603	Fiction	06
LS20604	Drama	06
TT20805	Assessment of Learning	08
Total		32

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#### Semester 03

Module Code	Module	Credit
LS30801	Applied Linguistics	08
LS30602	Critical Reading and Writing	06
LS30803	Sri Lankan Literature	08
TT30804	Teaching Learning Methods	08
IT30 205	Fundamentals of ICT-I	02
Total		30

#### Semester 04

Module Code	Module	Credit
LS40401	Mass Communication	04
LS40802	Commonwealth Literature	08
LS40803	Poetry	08
LS40604	Discourse Analysis	06
IT40205	Fundamentals of ICT-II	02
ET40206	Meditation for Stress Management	02
ET40207	Cosmology	02
	26	
Module Code	Module	Credit
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TT50601	Curriculum Development	06
TT50602	Advanced Instructional Media	06
TT50603	Educational Research Methods	06
LS50604	Advanced ELT Methodology	06
LS5045	South Asian English	04
IT60290	Photography	02
Total		28

Module Code	Module	Credit
TT60401	Professional Development	06
TT60602	Educational Management	06
TT60403	Internship/Teaching Practice	08
TT61004	Project (T/L material development or Research	10
TT60205	Career Guidance and Counseling	02
Total		30



## Bachelor of Technology Programme in Information & Communication Technology (ICT)

Introduction of the Degree

The BTech Program in Information & Communication Technology (ICT) is a three year course of study that combines studies in Computer Science, Software Development, Information Systems, Multimedia, Web Development and Computer Networks.

The program has a flexible structure allowing students to choose from a number of specializations; software development, information systems, computer networks, web development and multimedia production

The program includes the study of contract administration, business management and the presentation of information. Over and above this the student will be able to specialize in a field relevant to the industry, which will enhance the capability and value of the B.Tech graduate to the Information and Communication Technology industry.

These degree programmes are specially designed for COT's (COT - College of Technology) NVQ Levels 5 and 6 graduates to upgrade their competencies upto degree level.

### **Entry Qualifications**

#### **Diploma specialization for entry**

Information & Communication Technology, Television Production, Telecommunication

- NVQ level 5 in the relevant technology area (Information & Communication Technology, Video & Television Production Technology)
  or
- ii. HNDE, NDT, NDES, NDET or equivalent qualification in the relevant technology area specified below and acceptable to the Academic Council of the University of Vocational Technology

or

iii. Any other qualification which the Tertiary and Vocational Education Commission has accepted to be equivalent to NVQ level 5 or 6

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least 1 year duration.

Preference will be given to those applicants with Post Diploma industrial experience of at least one year duration.

or

iv. Qualified A/L Streams - (Physical Science and Biological Science with Physics or ICT as a subject Or any other stream with ICT as a subject ) **(Only for weekday)** 

# Bachelor of Technology in Software Technology

### Semester 01

Module	Module	Credits
Code		
EE10404	Mathematics	04
IT10302	Computer Architecture & Operating System	03
IT10403	Object-Oriented Programming with C++	04
IT10404	Software Development practices	04
IT10405	Computer Networks	04
IT10306	Database Analysis and Design	03
IT10407	Internet Technologies	04
LS10316	Communication Skills-I	03
	Total	29

Module	Module	Credits
Code		
IT20401	Fundamentals of Mass Communication	04
IT20402	Data Structures and Algorithms	04
IT20403	Network Administration	04
IT20404	Database Programming	04
IT20405	Database Management Systems	04
IT20306	Enterprise Technologies and Architectures	03
IT20607	Web Programming	06
LS10317	Communication Skills-II	03
	Total	32

Module	Module	Credits
Code		
IT30401	Programming in NET	04
IT30602	Web Technology & Applications	06
IT30303	Digital Electronics	03
IT30604	Software Architectures and Design	06
IT30405	Software Deployment and Evolution	04
MS30411	Project Management Practices	04
MS30412	Entrepreneurship Development and Management	04
	Total	31

Module	Module	Credits
Code		
IT40601	Programming in Java	06
IT40402	Real-Time programming	04
IT40603	Advanced Net	06
IT40404	Software Testing & Reliability	04
IT40405	Database Implementation	04
EE40301	Research Methods	03
ET40290	Meditation and Stress Management	02
EE40290	Astronomy and Cosmology	02
EE40291	Fundamentals of Energy Management	02
	Total	33

Module Code	Module	Credits
IT51401	Work Based / Industrial Training	14
	Total	14

Module Code	Module	Credits
IT60401	Enterprise System Design	04
IT60502	Enterprise NET	06
IT60503	Enterprise Java	06
IT60404	Professional Issues in Information Technology	04
IT60405	Information Systems Management	04
IT60290	Photography	02
MS60291	Occupational health & safety	02
IT61808	Final Year Project (Software Development Project)	18
	Total	46

## Bachelor of Technology in Multimedia & Web Technology

### Semester 01

Module	Module	Credits
Code		
EE10404	Mathematics	04
IT10302	Computer Architecture & Operating System	03
IT10403	Object-Oriented Programming with C++	04
IT10404	Software Development practices	04
IT10405	Computer Networks	04
IT10306	Database Analysis and Design	03
IT10407	Internet Technologies	04
LS10316	Communication Skills-I	03
	Total	29

Module	Module	Credits
Code		
IT20401	Fundamentals of Mass Communication	04
IT20402	Data Structures and Algorithms	04
IT20403	Network Administration	04
IT20404	Database Programming	04
IT20405	Database Management Systems	04
IT20306	Enterprise Technologies and Architectures	03
IT20607	Web Programming	06
LS10317	Communication Skills-II	03
	Total	32

Module	Module	Credits
Code		
IT30401	Programming in NET	04
IT30602	Web Technology & Applications	06
IT30303	Digital Electronics	03
IT30311	Art and Design	03
IT30612	2D and 3D Graphics	06
IT30413	Audio & Video Production Techniques	04
MS30411	Project Management Practices	04
MS30412	Entrepreneurship Development and Management	04
	Total	34

Module	Module	Credits
Code		
IT40311	Software Quality Assurance	04
IT40612	Digital Signal Processing Techniques & Image Processing	06
IT40413	Audio and Video Editing Techniques	04
IT40614	Multimedia Product Development	06
IT40615	Animation Technology and Applications	06
EE40301	Research Methods	03
ET40290	Meditation and Stress Management	02
EE40290	Astronomy and Cosmology	02
EE40291	Fundamentals of Energy Management	02
	Total	35

Module Code	Module	Credits
IT51401	Work Based / Industrial Training	14
Total 14		14

Module	Module	Credits
Code		
IT60401	Enterprise System Design	04
IT60411	Web Interface Design & Application Software	04
IT60312	Multimedia Data Processing	03
IT60404	Professional Issues in Information Technology	04
IT60405	Information Systems Management	04
IT60290	Photography	02
MS60291	Occupational health & safety	02
IT61808 Project (Multimedia & Web Development Project)		18
Total 41		

# Bachelor of Technology in Network Technology

### Semester 01

Module	Module	Credits
Code		
EE10404	Mathematics	04
IT10302	Computer Architecture & Operating System	03
IT10403	Object-Oriented Programming with C++	04
IT10404	Software Development practices	04
IT10405	Computer Networks	04
IT10306	Database Analysis and Design	03
IT10407	Internet Technologies	04
LS10316	LS10316 Communication Skills-I	
Total		29

Module	Module	Credits
Code		
IT20401	Fundamentals of Mass Communication	04
IT20402	Data Structures and Algorithms	04
IT20403	Network Administration	04
IT20404	Database Programming	04
IT20405	Database Management Systems	04
IT20306	Enterprise Technologies and Architectures	03
IT20607	Web Programming	06
LS1 <mark>0317</mark>	Communication Skills-II	03
	Total	32

Module	Module	Credits
Coue		
IT30401	Programming in NET	04
IT30602	Web Technology & Applications	06
IT30303	Digital Electronics	03
IT30321	Data Communication	04
IT30622	System Administration	06
MS30411	Project Management Practices	04
MS30412	Entrepreneurship Development and Management	04
	Total	31

### Semester 04

Module	Module	Credit
Code		
IT40621	Internetwork Switching	06
IT40422	Internetwork Routing	04
IT40623	Windows Server Administration	06
IT40624	Network Systems	06
IT40425	Wireless Communication	04
EE40301	Research Methods	03
ET40290	Meditation and Stress Management	02
EE40290	Astronomy and Cosmology	02
EE40291 Fundamentals of Energy Management		02
	Total	35

Module Code	Module	Credit
IT51401	Work Based / Industrial Training	14
Total		14

Module	Module	Credit
Code		
IT60421	Information Systems Security & Practices	04
IT60422	Broadband Networks	04
IT60323	Photonics and Fiber Optics	04
IT60404	Professional Issues in Information Technology	04
IT60405	Information Systems Management	04
IT60290	Photography	02
MS60291	Occupational health & safety	02
IT61508	Project (Network Development Project)	18
	Total	42

# Bachelor of Technology in Mechatronics Technology

Introduction of the Degree

University of Vocational technology boasts of degree that suits the future.B.Tech in Mechatronics degree gives the needed education for manufacturing of products to suit the society and it is a complex are of study which spreads its wings to medicine, space science and many more

### **Entry Qualifications**

#### **Diploma specialization for entry**

Mechatronics, Electrical, Electronics, Mechanical, Production, Automobile, Bio-Medical

- NVQ level 5 in the relevant technology area (Mechatronics, Electrical, Electronics, Mechanical, Production, Automobile, Bio-Medical)
  or
- ii. HNDE, NDT, NDES, NDET or equivalent qualification in the relevant technology area specified below and acceptable to the Academic Council of the University of Vocational Technology

or

iii. Any other qualification which the Tertiary and Vocational Education Commission has accepted to be equivalent to NVQ level 5 or 6

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least one year.

iv. Qualified A/L Streams - (Engineering Technology) (Only for weekday)

Semester 01		
Module	Module	Credits
Code		
SM10480	Engineering Mathematics I	04
SM10381	Engineering Physics	03
EE10401	Theory of Electricity	04
LS10308	Communication Skills I	03
MF10501	Workshop Technology	05
EE10402	Principles of Electronics	04
MF10580	Engineering Drawing	05
EE10203	Software Applications	02
	Total	30
Semester 02		
Module	Module	Credits
Code		
SM20480	Engineering Mathematics II	04
MF20401	Thermodynamics	04
MF20402	Strengths of Materials	04
EE20401	Electrical Technology	04
IT10403	Computer Programming C++	04
LS20308	Communication Skills II	03
MF20403	Engineering Mechanics	04
EE20302	Electronics	03
Total		30
Semester 03		
Module	Module	Credits
Code		
SM30480	Engineering Mathematics III	03
N4F20F01	Machina Docign	05

Pneumatic and Hydraulic Systems

Electrical Machines and Drives

Introduction to Robotics & Vision Systems

Total

Introduction to communication systems

**Control Systems** 

Sensors and Actuators

MF30402

EE30401

EE30402

EE30303

EE30304

EE30405

03	
04	
03	
30	
edits	
)3	
)5	
)4	
)4	
)4	
)3	
)3	
04	
30	

FACULTY OF INDUSTRIAL & VOCATIONAL TECHNOLOGY

Semester 01		
Module	Module	Credits
Code		
SM10480	Engineering Mathematics I	04
SM10381	Engineering Physics	03
EE10401	Theory of Electricity	04
LS10308	Communication Skills I	03
MF10501	Workshop Technology	05
EE10402	Principles of Electronics	04
MF10580	Engineering Drawing	05
EE10203	Software Applications	02
	Total	30
Semester 02		
Module	Module	Credits
Code		
SM20480	Engineering Mathematics II	04
MF20401	Thermodynamics	04
MF20402	Strengths of Materials	04
EE20401	Electrical Technology	04
IT10403	Computer Programming C++	04
LS20308	Communication Skills II	03
MF20403	Engineering Mechanics	04
EE20302	Electronics	03
Total		30
Semester 03		
Module	Module	Credits
Code		
SM30480	Engineering Mathematics III	03
N4F20F01	Machina Docign	05

Pneumatic and Hydraulic Systems

Electrical Machines and Drives

Introduction to Robotics & Vision Systems

Total

Introduction to communication systems

**Control Systems** 

Sensors and Actuators

MF30402

EE30401

EE30402

EE30303

EE30304

EE30405

03	
04	
03	
30	
edits	
)3	
)5	
)4	
)4	
)4	
)3	
)3	
04	
30	

FACULTY OF INDUSTRIAL & VOCATIONAL TECHNOLOGY

Module	Module	Credits
Code		
SM40380	Research Methods	03
EE40481	Presentation of Engineering Information	04
MS404	Industrial Economics & Management	04
EE40501	PLC Programming	05
EE40402	Modeling and Simulation	04
EE40403	Energy Management	04
EE40304	Mechanical and Electrical Measurements	03
EE40405	Power Electronics	04
MS30412	Entrepreneurship Development	02
ET40290	Stress Management	02
	Total	35

#### Semester 05

Module Code	Module	Credits
EE51490	Work Based Training	14
EE50201	CAD/CAM Solid modeling of components	02
	Total	16

Module Code	Module	Credits
EE61891	Final Year Project	18
EE60601	Computer Aided Design and Manufacturing	06
EE60302	Quality Management	03
EE60303	Microprocessor based systems	03
EE60404	Industrial Communication Systems	04
EE60505	Design Automated Systems	05
EE60306	Digital Control Systems	03
IT60290	Photography	02
MF60204	Occupational Health and Safety	02
	Total	46

## Bachelor of Technology in Building Services Technology

Introduction of the Degree

Sri Lanka has set its sights on expanding its tourism services and aims to transform its tourism sector as the largest foreign exchange earner. In par with the boom in tourism industry, number of projects have been started in construction sector specially highest buildings for hostels, hospitals, apartments etc.

A vacuum will be generated in job market in building services sector for professional in near future. It is proud to say that university of Vocational Technology is the only university that offers, Building services degree in Sri Lanka that smite the above demand.

Bachelor of Technology in building services degree caters the world wide demand for building services professional who have a sound knowledge of engineering principles and the ability to apply this knowledge within the building services industry.

## **Entry Qualifications**

#### **Diploma specialization for entry**

Construction, Civil, Mechanical, Refrigeration & Air Conditioning, Electrical & Quantity Surveying

- NVQ level 5 in the relevant technology area (Construction, Civil, Mechanical, Refrigeration & Air Conditioning, Electrical & Quantity Surveying)
  or
- HNDE, NDT, NDES, NDET or equivalent qualification in the relevant technology area specified below and acceptable to the Academic Council of the University of Vocational Technology

or

iii. Any other qualification which the Tertiary and Vocational Education Commission has accepted to be equivalent to NVQ level 5 or 6

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least 1 year duration

Preference will be given to those applicants with Post Diploma industrial experience of at least one year duration.

iv. Qualified A/L Streams - (Engineering Technology) (Only for weekday)

Module Code	Module	Credits
SM10480	Engineering Mathematics I	04
SM10381	Engineering Physics	03
EE10401	Theory of Electricity	04
LS10308	Communication Skills	03
CT10301	Building Environment & Human Comfort	03
CT10502	Construction Technology I	06
CT10503	Building Services Drawing	05
CT10404	Architectural Aspects of Building Services	05
	Total	33

Module Code	Module	Credits
SM20480	Engineering Mathematics II	04
MF20401	Thermodynamics	04
MF20402	Strengths of Materials	04
EE20401	Electrical Technology	04
IT10403	Computer Programming	04
LS20308	Communication Skills	03
CT20601	Construction Technology II	06
CT20402	Fluid Mechanics	04
	Total	33

Module Code	Module	Credits
CT30401	Lighting Systems in Buildings	04
CT30602	Ancillary Services in Buildings I	06
CT30603	HVAC Systems	06
CT30404	Building Acoustics	04
CT30405	Installation of Piped Services in Buildings	04
EE30406	Electrical Installation Technology	04
	Total	28

Module Code	Module	Credits
MS40313	Research Methodology	03
EE40481	Presentation of Engineering Information	04
MS40415	Industrial Economics & Management	04
CT40401	Building Services Integration Software	04
CT40302	Ancillary Services in Buildings II	03
CT40403	Energy Management in Buildings	04
CT40604	Measurement Practice & Estimating	06
CT40405	Construction Planning & Control	04
MS30412	Entrepreneurship Development	02
ET40290	Meditation & Stress Management	02
	Total	36

Module Code	Module	Credits
CT51490	Work Based Training	14
CT50202	Building Management Systems Software	02
Total		16

Module Code	Module	Credits
CT61891	Final Year Project	18
CT60601	3D Modeling for Buildings	06
CT60402	Quality Management in Buildings	04
СТ60403	Building Management for Sustainability	04
СТ60404	Decision Making Techniques	04
IT60290	Photography	02
MF60291	Occupational Health and Safety	02
Total		40

# Bachelor of Technology in Manufacturing Technology

Introduction of the Degree

Bachelor of Technology in Manufacturing Technology is another important degree program offered by faculty of industrial and vocational technology of University of Vocational Technology. Then objective of this program is to provide technical level graduates to the industry especially in manufacturing related fields.

During the study program students will gain an in-depth knowledge on all the important areas of manufacturing technology and also a reasonable managerial exposure. The industrial training integrated to the program will future develop the said competencies of our graduates.

### **Entry Qualifications**

#### **Diploma specialization for entry**

Production, Mechatronics, Refrigeration & Air Conditioning, Mechanical, Automobile, Welding, & Farm Machinery

- NVQ level 5 in the relevant technology area (Production, Mechatronics, Electrical, Electronics, Mechanical, Automobile, Bio-Medical)
  or
- HNDE, NDT, NDES, NDET or equivalent qualification in the relevant technology area specified below and acceptable to the Academic Council of the University of Vocational Technology

or

iii. Any other qualification which the Tertiary and Vocational Education Commission has accepted to be equivalent to NVQ level 5 or 6

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least 1 year duration.

Preference will be given to those applicants with Post Diploma industrial experience of at least one year duration.

or

iv. Qualified A/L Streams - (Physical Science / Engineering Technology) (Only for weekday)

Module	Module	Credits
Code		
SM10480	Engineering Mathematics I	04
SM10381	Engineering Physics	03
EE10401	Theory of Electricity	04
LS10308	Communication Skills I	03
MF10501	Workshop Technology	05
EE10402	Principles of Electronics	04
MF10580	Engineering Drawing	05
MF10381	Engineering Chemistry	03
	Total	31

Module	Module	Credits
Code		
SM20480	Engineering Mathematics II	04
MF20401	Thermodynamics	04
MF20402	Strengths of Materials	04
EE20401	Electrical Technology	04
IT10403	Computer Programming in C++	04
LS20308	Communication Skills II	03
MF20403	Engineering Mechanics	04
MF20304	Engineering Measurements	03
	Total	30

Module	Module	Credits
Code		
SM30480	Engineering Mathematics III	03
MF30501	Machine Design	05
MF30402	Pneumatic and Hydraulic Systems	04
EE30401	Control Systems	04
MF30603	Manufacturing Technology 1	06
MF30404	Mechanics of Materials	04
MF30405	Applied Thermodynamics	04
	Total	30

Module	Module	Credits
Code		
SM40380	Research Methods	03
EE40481	Presentation of Engineering Information	04
MS404	Industrial Economics & Management	04
EE40501	PLC Programming	05
EE40402	Modeling and Simulation	04
EE40403	Energy Management	04
MF40601	Manufacturing Technology II	06
MF40402	Mechanics of Machines	04
MS30412	Entrepreneurship Development	02
ET40290	Stress Management	02
Total		38

Module Code	Modules	Credits
MF51490	Work Based Training	14
EE50201	CAD/CAM Solid modeling of components	02
Total		

Module	Module	Credits
Code		
MF61891	Final Year Project	18
EE60601	Computer Aided Designing and Manufacturing	06
MF60401	Quality Management in Manufacturing	04
MF60402	Environmental Management and Cleaner Production	04
MF60403	Work study & Ergonomics	04
IT60290	Photography	02
MF60204	Occupational Health and Safety	02
Total		40

## Bachelor of Technology in Food Process Technology

Introduction of the Degree

The food industry is one of the largest industries in Sri Lanka as well as in the world which needs highly trained professionals to ensure the sustainable supply, production, quality and safety of food. University of Vocational Technology offers B. Tech in Food Process Technology to address this need. B. Tech in Food Process Technology degree will enable students to learn the total food process starting from farm to the consumer.

To achieve this, the degree provides students with a thorough theoretical, as well as practical and hands-on, approach to all related subjects such as food chemistry, microbiology, food processing, food engineering, production, nutrition and quality assurance.

If you have a diploma related to food, Agriculture or quality assurance, you may apply for this degree to become a professional in the field of Food Technology.

## **Entry Qualifications**

#### **Diploma specialization for entry**

Production, Mechatronics, Refrigeration & Air Conditioning, Mechanical, Automobile, Welding, & Farm Machinery

- i. Food Technology Diploma (NVQ level 5/6) or
- ii. Agriculture related diploma (NVQ level 5/6) **or**
- iii. Hotel sector diploma (NVQ level 5/6) or
- iv. Any other related diploma/equivalent, acceptable to the Academic Council of the University

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least one year.

Preference will be given to candidates with relevant work experience

or

v. Qualified A/L Streams - (Bio-Systems Technology, Biological Sciences) (Only for weekday)

Module Code	Module	Credits
MS10480	Engineering Mathematics I	04
AF10501	Introduction to Food Technology	05
AF 10602	Introduction to Raw & Processed foods	06
AF 10503	Food Preservation	05
AF 10404	Food & Nutrition	04
AF 10605	Food Chemistry	06
LS 10308	Communication Skills	03
Total		33

Module Code	Module	Credits
AF 20701	Principles of Food Analysis	07
AF 20602	Post-harvest Biology and Technology	06
AF 20703	Food Microbiology	07
AF 20704	Food Engineering	07
AF 20305	Introduction to Statistical Methods	03
FS 20308	Communication Skills	03
	Total	33

Module Code	Module	Credits
AF 30601	Food Processing Technology Fundamentals	06
AF 30602	Food Safety and Quality Control	06
AF 30503	Sensory Evaluation	05
AF 30505	Food Packaging	05
AF 30506	Food Hygiene and Plant Sanitation	05
AF 30307	IT Applications in Food Industry	03
	Total	30

Module Code	Module	Credits
AF 40601	Food Product Development and Evaluation	06
AF 40302	Nutraceuticals and Functional Foods	03
AF 40503	Introduction to Management & Finance	05
AF 40504	Marketing management in Food Industry	05
AF 40505	Research Methods and Experimental Design	05
AF 40306	Food Additives	03
AF 40307	Organic Food Production	03
Total		30

### Semester 05 Specialization streams

Grains, Fruits, Vegetables, Spices and Herbal Product Technology		
Module Code	Module	Credits
AF 50801	Grain ,Nuts and Oil seed Product Technology	08
AF 50802	Fruit and Vegetable Product Technology	08
AF 50803	Spice product technology	08
AF 50611	Industry Training	06
Total		

Fish , Meat and Dairy product Technology		
Module Code	Module	Credits
AF 50804	Fisheries Product Technology	08
AF 50805	Dairy Product Technology	08
AF 50806	Meat Product Technology	08
AF 50611	Industry Training	06
	Total	30

Culinary and Bakery Product Technology		
Module Code	Module	Credits
AF 50607	Introduction to Culinary Technologies	06
AF 50608	Introduction to Kitchen Operations and Management	06
AF 50609	Food and Beverage Service Management	06
AF 50610	Bakery and Pastry Products Technology	06
AF 50611	Industry Training	06
Total 30		
AF 50611: Applicable for part-time programme		

Module Code	Module	Credits
AF 61601	Industry Based Project	10
AF 61602	Project Management	04
AF 61603	Waste Management in Food Industries	04
MS402	Entrepreneurship Development	04
MF60402	Environmental Management and Cleaner Production	04
MF60204	Occupational Health & Safety	02
Total		28

# Bachelor of Technology in Industrial Management

Introduction of the Degree

The Department of Management Studies has introduced B.Tech in Industrial Management Technology with the aim of preparing students to assume managerial roles in the organizations function within production and manufacturing based industries. This provides a vibrant opportunity for a successful management

The Program curriculum has a unique blend of Modules which has been designed focusing on the application of engineering principles to the planning and operational management of Industrial and Manufacturing operations, and prepares students to plan and manage such operations effectively in various industrial scenarios
# **Entry Qualifications**

I. Completion of NVQ Level 5/6 in any subject discipline specified below.

- Electrical & Electronic/Automobile/Mechatronics
- Mechanical/ Refrigeration & Air Conditioning
- Information & Communication Technology
- Industrial Management
- Construction/Civil / Quantity Surveying
- Production/ Farm Machinery /Manufacturing
- Production/ Farm Machinery /Manufacturing
- Agriculture / Food Technology

or

HNDE/NDT/NDES or equivalent qualification acceptable to the Academic council of UoVT

ii. Qualified A/L Streams - (Commerce, Engineering Technology, Physical Science) (Only for weekday)

Module Code	Module	Credits
MS10401	Management Theory and Practice	04
MS10402	Mathematics for Management	04
MS10403	Business Communication Skills-I	04
MS10404	Introduction to Accounting	04
MS10405	Marketing Management	04
MS10406	Information Technology for Managers	04
MS10307	Business Statistics -I	03
MS10408	Introduction to Economics	04
	Total	31

Module Code	Module	Credits
MS20401	Human Resource Management	04
MS20402	Strategic Management	04
MS20403	Economics for Business	04
MS20404	Business Communication Skills -II	04
MS20405	Organizational Behavior	04
MS20406	Introduction to Quality Management	04
MS20407	Costing & Cost Benefits Analysis	04
MS20308	Brand Management	
MS20309	Quality Control Techniques	03
	Total	31

Module Code	Module	Credits
MS30401	Entrepreneurship and Business Management	04
MS30402	Management Accounting	04
MS30403	Project Management	04
MS30404	Industrial Economics	04
MS30405	Business Statistics –II	04
MS30406	Industrial and Commercial Law	04
MS30407	Operations Management	04
MS30408	Maintenance Management	
EE40403	Energy Management	04
	Total	32

Module Code	Module	Credits
MS40301	Electronic Commerce and Web Technology	03
MS40402	Productivity Management	04
MS40403	Logistics & Supply chain management	04
MS40404	Quantitative Techniques in Decision Making	04
MS40405	Financial Management	04
MS40406	Research Methods	04
MS40407	Management of Technology	04
EE40200	Cosmology	02
EE40290	Stress management	
MS40408	Introduction to Computer Aided Design and Manufacturing	04
MS40409	Management Information System (MIS)	04
	Total	33

Module Code	Module	Credits
MS51404	Work Based Industrial Training	14
	Total	14

Module Code	Module	Credits
MS60301	Plant Layout, and Materials Handling	03
MS60291	Occupational Health & safety	04
MS60402	International Trade and Export Marketing	04
MS60303	Innovation Management	03
MS60204	Environmental Management and Cleaner Production	03
MS61804	Work study & Ergonomics	04
MS61805	Final project	18
	Total	38

# Bachelor of Technology in Film & Television Production Technology

Introduction of the Degree

It is globally assured that the audio visual oriented storytelling is developing only on a technological platform laid by advancing the technical knowledge and skills of employment as a social change strategy.

The degree program in Film and Television Production Technology is designed first time in Sri Lanka as the higher education pathway to audio visual creative industries. This incorporates an educational approach into film and television media and in order to increase skills, elevate knowledge, create favourable attitudes and ultimately motivate workforce to be socially responsible in their own lives towards the human society.

Undergraduates study the extents of Direction, Developing Concepts for screen, Writing for screen, Motion Photography for Film and Television, Audio visual editing, Production designing, Production Technology and Techniques, Production Management and methods, Post-production Technology and techniques, Post-production Management and methods.

# **Entry Qualifications**

I. NVQ level 5 or equivalent qualification in the field of Film and Television Production and Technology

#### or

ii. NVQ level 5 or equivalent qualification in the field of Electronics

#### or

iii. National Diploma in Video Production Technology awarded by the University of Vocational Technology

#### or

iv. National Diploma in Non-Linear Editing awarded by the University of Vocational Technology Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least one year

Module	Madula	Cradita
Code	Wodule	creatts
FT10401	Film Language and Aesthetics	04
FT10402	Basics of Broadcasting Technology	04
FT10303	Designing for Screen Production	03
FT10304	Elements of Art and Design	03
FT10405	Production Management in Screen Production	04
FT10306	Sound Designing Technology and Techniques	04
FT10307	Techniques of Audio Video Product Development	03
FT10308	Basics of Production Designing	03
FT10309	Mathematics for Film and Television Technology	03
LS10308	Communication Skills I	03
	Total	34

Module Code	Module	Credits
FT20401	Understanding Direction and Director	04
FT20402	Online and Offline Editing	04
FT20303	Fundamentals of Screenplay Writing	03
FT20304	Basics of Technology in Audio Visual Production	03
FT20305	Designing 2D Graphics for AV Production	03
FT20306	Camera Technology and Techniques	03
FT20307	2D Animation for AV Production	03
FT20308	Screen Production Planning Methods	03
FT20309	Audio Technology and Techniques in Post-production	03
FT20310	Color Correction and Compositing Techniques	03
FT20411	Basic Technologies of Lighting and Lighting Techniques	- 04
FT20412	Comprehending 3D Animation in Post-production	
LS20308	Communication Skills II	03
	Total	33

Module Code	Module	Credits
FT30401	Aesthetics of Lighting	04
FT30402	Aesthetics of Editing and Advanced Techniques	04
FT30303	Screenplay Writing	03
FT30304	Production Designing	03
FT30405	Advanced Technologies of Digital Cinema and Digital Television	04
FT30406	Advanced Cinematography	04
FT30407	Advanced Sound Engineering and Designing	
FT30308	Film and Television Theory	03
FT30309	News, News Features and Current Affairs in Television	03
FT30310	History of Film and Television	03
FT30311	Technological Developments of Film and Television	
FT30312	Production of Audio Video Content for New Media	03
	Total	34

Module Code	Module	Credits
FT40301	Research Methodology	03
FT40302	Advanced Post-production in Cinema	03
FT40303	Television Genres	03
FT40304	Visual Effects (VFX)	03
FT40305	Theorizing of Documentary	03
FT40306	Individual Project	03
FT40307	Avant Garde and The Popular	03
FT40308	Management in Media Industry	03
FT40409	Production Aspects and Techniques	04
FT40310	Film, Technology and Making Meaning	03
FT40211	Entrepreneurship Development in Film and Television Trade	02
	Total	33

Module Code	Module	Credits
FT51401	Work Based Training	14
	Total	14

Module	Module	Cradita
Code		Credits
FT60301	Director and Direction	03
FT60302	Advanced Film Theory	03
FT60303	Group Project	03
FT60304	Media Marketing and Advertising	03
FT60305	Contemporary Trends in Film & Television	03
FT60306	Film, Television and Society	03
FT61807	Final Year Project	18
MS60291	Occupational Health and Safely	02
	Total	38

# Bachelor of Technology in Quantity Surveying

Introduction of the Degree

Construction is one of the fastest growing industries in the world as well as in Sri Lanka. Development of new technology and new industrial knowledge give rise to its growing success. Construction offers more job opportunities than most of the other industries for those who seek high profile, Lucrative and satisfying career.

The Quantity Surveyor is a highly acclaimed profession within the construction industry and a wellqualified and a well-experienced Quantity Surveyor plays an indispensable role in the Industry and is highly demanded both locally and internationally. Quantity surveyor provide a range of services, including cost advice and forecasting, contractual advice, cost control and financial management of Construction projects from the inception to completion. This type of work provides an excellent basis for progression to management position throughout the industry.

Bachelor of Technology degree in Quantity Surveying offered by UNIVOTEC aims to provide practicing Quantity Surveyors employed at the middle level with diploma level qualifications, an opportunity of achieving professional advancement through acquisition of higher academic qualifications.

# **Entry Qualifications**

I. NVQ level 5 or equivalent in Quantity Surveying

#### or

ii. Any other diploma in Quantity Surveying of at least one year full time or equivalent part time offered by a TVEC registered training provider with one (01) year of postdiploma industry/teaching experience in the relevant field

#### or

iii. Any other qualification accepted by Academic Council of University of Vocational Technology

Module Code	Module	Credits
CT10608	Measurement	06
CT10609	Quantity Surveying Practice I	06
CT10510	Contract Administration I	05
CT10511	Construction Technology I	05
CT10512	Construction Economics	05
CT10213	Problem Solving and Decision Making	02
LS10308	Communication Skills I	03

## Semester 02

Module Code	Module	Credits
CT20609	Quantity Surveying Practice II	06
CT20510	Construction Law-I	05
CT20511	Construction Technology-II	05
CT20512	Computer Aided Quantity Surveying	05
CT20213	Teamwork and Leadership	02
CT20214	Creating& maintaining a learning culture at workplace	02
LS20308	Communication Skills II	03
CT20315	Presentation of Engineering Information	03

Module Code	Module	Credits
CT30612	Finance for Developments	06
CT30613	Advanced Economics	06
CT30614	Claims Management	06
CT30615	Construction Technology – III	06
CT30616	Contract procurement strategy	06

Module Code	Module	Credits
CT40512	Cost Management	05
CT40513	Economics in Construction Industry	05
MS30411	Project Management	04
CT40514	Building Engineering Services	05
CT40615	Construction Law	06
ET40290	Meditation & Stress Management	02
MS30212	Entrepreneurship Development	02
MS40313	Research Methods	03

# Semester 05

Module Code	Module	Credits
CT50203	Ethics and Professional Practice	02
CT51890	Work Based / Industrial Training	18

Module Code	Module	Credits
CT60410	Commercial Management	04
CT60411	Cost Planning	04
CT60612	Sustainability and Facility Management	06
CT60613	Advanced Measurements	06
CT60414	Dispute Management	04
MF60291	Occupational Health and Safety	02
CT61891	Final Year Project	18

# Bachelor of Bachelor of Technology in Construction Technology and Resource Management

Introduction of the Degree

In Sri Lankan construction industry gap exists between middle level technologically qualified personnel (middle level technicians) and graduates in Civil Engineering. Aim of this degree programme is to fulfill this gap. Graduates of the proposed degree need to be equipped with both theoretical and practical competencies required to manage construction sites which involves a multitude of stakeholders and resources.

This programme has been designed aiming at national needs while giving due consideration to global trends and practices in conjunction with construction industry personnel, professional bodies together with the academia in civil engineering and allied fields to ensure that their marketability both locally and internationally. Degree is aligned with the requirements of the Sydney Accord.

It covers the following aspects:

- · Contract Administration
- · Construction Law and Claim Management
- · Building Economics
- · Pre and Post Contract Management
- · Measurements
- · Micro tunneling,
- Tall & deep construction Installation and use of tower cranes, complex shoring work, etc.
- Challenges in basement construction in restricted areas, Vertical transportation modes of material in high rise construction.
- · Construction failures and temporary work failures and remedial methods
- · Landslide mitigation techniques and flood protection methodologies
- · Alternative material novel solutions to scarcity

# **Entry Qualifications**

I. NVQ level 5 or equivalent in Construction Technology

#### or

ii. HNDE, NDT, NDES, NDET or equivalent diploma in Civil / Construction Technology

#### or

- iii. Any other diploma of at least one year full time or equivalent part time in Civil/ Construction Technology offered by a TVEC registered training provider with 01 year of post – diploma Industry / teaching experience in the relevant field
- iv. Any other qualification accepted by Academic Council of University of Vocational Technology

Exemptions may be granted in relevant modules after a proper evaluation for those who have NVQ level 6 or equivalent qualifications. Preference will be given to those applicants having post diploma industrial experience of at least one year.

v. Qualified A/L Streams - (Engineering Technology) (Only for weekday)

Module Code	Module	Credits
SM10682	Mathematics for Construction Technology	6
LS10509	Communication Skills	5
CT10505	Construction materials	5
CT10506	Hydraulics and hydrology	5
CT10507	Soil Mechanics and Geotechniques	5
EE10404	Applied Electricity	4

# Semester 02

Module Code	Module	Credits
CT20603	Construction Technology- I	6
CT20604	Mechanics of solids and Structural Analysis	6
CT20405	Highway Engineering	4
CT20406	Water Resource Engineering	4
CT20407	Introduction to Landscaping	4
CT20608	Estimating & Tendering in Construction	6

Module Code	Module	Credits
CT30406	Building Services	4
CT30607	Construction Economics and Accounting	6
CT30608	Surveying & Leveling (+ Camp)	6
CT30409	Design of Structural Elements	4
CT30410	ICT Application in Construction	4
CT30611	Application of Architecture and Urban Planning	6

Module Code	Module	Credits
CT40406	Construction Law & Professional Ethics	4
CT40607	Construction Technology II	6
CT40408	Construction Planning and Management	4
CT40609	Application of Environment Science	6
CT40410	Construction contract administration	4
CT40611	Research Methodology and concept design of projects	6

## Semester 05

Module Code	Module	Credits
CT51891	Work Based Training	18
CT50202	Project Proposal formulation	2

Module Code	Module	Credits
CT61891	Final Year project	18
IT60290	Photography	2
MS30412	Entrepreneurship development	2
CT60605	Project Management	6
CT60606	**Highway & Railway Infrastructure (Elective)	6
CT60607	**Water Resources and Coastal Infrastructure(Elective)	6
CT60608	**High Rise buildings(Elective)	6



# **Degree Programme in Hotel Management**

As the hospitality industry of the country is blooming, there is a great demand for people with higher educational qualifications, at degree level along with proven practical expertise to manage hotels. At present, there is a group of people employed in the hotel sector at middle managerial level with diploma or equivalent qualifications. However, their upward mobility to higher level managerial positions are limited as there is no avenue available for them to obtain higher educational qualifications, at degree level from the state universities, as all other state universities do not facilitate lateral entry. Proposed degree would include the following.

- Hotel Finance
- Marketing and Sale
- Public Relations and People Management
- Food and Beverage
- Kitchen Operations
- Cost Management
- Nutrition
- Scientific Knowledge of Hygiene
- Quality Management
- Project Management
- Business Planning
- Exposure to one or more foreign language other than English

# CONTINUING EDUCATION CENTER





ontinuing Education Centre (CEC) is the University arm formulated to conduct Diploma, certificate, short courses, continuous professional development programmes and other extension programmes. As empowered by the Act of Parliament, the University is continuing the training courses such as diploma, Certificate and all kinds of short courses initiated by the former organization, National Institute of Technical Education of Sri Lanka (NITESL).

Among the short term professional development programmes, Trainer Training and Assessor Training programmes are to be underlined due to the demand and essentiality in the field. Training of Trainers Programmes (TOT) are significantly designed for professional development of the personnel of the Industry and Teaching fields of the TVET sector. These courses are more practically oriented and sometimes, for some areas, those would be continuing for another period of one week or two weeks for further training.

Training of Assessors programme is highly significant for the all public and private training institutes of the TVET sector. Trainee assessors are selected by the Tertiary and Vocational Education Commission forwarded to the CEC for training. At the University they will undergo a one weeks training programme on assessment methodology including mock assessments.



Facilities & Resources

### Library

#### Learning Resources Development Centre

Equipped with modern multimedia and audio video equipment, materials and facilities.

Modern Lecture Halls

### Well-equipped Laboratories

Computer Laboratories Civil Engineering Laboratory Advanced Manufacturing Laboratory Electrical Engineering Laboratory Electronics Engineering Laboratory Construction Laboratory Language Laboratory





- Internet facilities
- Student Hostels
- Auditorium
- Canteen
- Transport & Recreation Facilities



Students are provided with library facilities during 7 days of the week. The library consists of books, journals, special collections, CD collections with both lending and reference facilities.

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# Cafeteria

A well-equipped cafeteria which can accommodate about 200 students at a time provides breakfast, lunch and dinner at reasonable prices.

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# Recreation

Number of recreational activities related to aesthetics and sports are being organized by various students' clubs of the university. Events like musical evenings, movie shows, annual Arts Day, Sports activities are organized by such clubs like the Art Circle, Sports Club, etc. enabling the students to get them involved in extracurricular activities providing them opportunities with wellbalanced personalities. Further, various social welfare projects are undertaken by the Students Assembly, enabling the students to improve their soft skills while not forgetting the community social responsibilities as a student.

# Computer Services

Computer services and access to internet are being provided for all the university students in the computer laboratories and in the library.

# Health Centre

University Health Centre is open for students during the weekdays enabling them to get the consultation of a physician.



# Student Counselling

A panel of student counsellors headed by a well-qualified chief counsellor provides counselling service for the students, enabling the students to face challenges successfully.



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