



DEPARTMENT OF TEXTILE AND APPAREL ENGINEERING
UNIVERSITY OF MORATUWA



2020

STUDENT
HANDBOOK

**DEPARTMENT OF
TEXTILE & APPAREL ENGINEERING**

University of Moratuwa

STUDENT HANDBOOK 2020



DEPARTMENT OF
TEXTILE & APPAREL ENGINEERING

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**DEPARTMENT
OF
TEXTILE AND
APPAREL
ENGINEERING,**

UNIVERSITY OF MORATUWA,
SRI ALANKA

.....

Photograph by; Mr. UT Dodampegamage

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Message from The Head of Department

The Department of Textile and Apparel Engineering was established as a fully fledged Department in 1985 under the guidance of the founder Head of Department, Emeritus Professor Lakdas D Fernando. The Department commenced the first University degree programme in textile and clothing technology in 1985 in order to fill an important niche in the required human resources to the quota driven apparel industry at the time.

The Department currently offers two undergraduate degree programmes namely B.Sc. Eng (Hons) and B. Design (Fashion Design and Product Development). The B. Sc. Engineering programme was established with the consultancy assistance from the University of Leeds and the Manchester Metropolitan University of UK. The B. Design degree programme was established in 2001 with the consultancy assistance from London College of Fashion of the University of Arts in London. Both degree programmes are well recognized locally as well as internationally and provide local and foreign employment and postgraduate opportunities as well as being accredited by the Textile Institute UK. The Department also offers a part time M. Sc. programme in Textile and Clothing Management and research degrees leading to M. Phil. and Ph. D qualifications.

With the introduction of a new B. Sc. Eng curriculum in the year 2015 and then in year 2020, the department has embarked on a journey to continuously improve the curriculum to reflect the needs of the industry and create knowledge to suit the industry requirements. The work on the new four-story building was successfully completed in the year 2020 enabling establishment of two brand new laboratories for Technical Textiles and Nanotechnology, an auditorium with a capacity for 300 students and other facilities for research and teaching activities. The B. Design program is also continually updated to reflect the pulse of the Fashion Design requirements in the industry.

The Department of Textile & Apparel Engineering is proud to be the main human resources provider to the largest manufacturing industry in Sri Lanka, bringing over 40% of the foreign exchange of the country. Being an industry catering to the world apparel market, the knowledge and the competencies expected from potential graduates are ever changing. We, as academics of the Department are well aware of the competencies expected by the industry through the strong links the Department has forged with the industry.

The Graduate Fashion Show is a gala event of the year to stage the final outcome of the students of the B. Design (FD & PD) programme. This event show cases the final collection of Fashion Design students and have attracted the attention of the top management of Textile and Apparel Industry. Several awards are announced at the Fashion Show for creative work of the Design students.

We are proud to have a very strong Alumni Association of the Department; 'Moratuwa University Textile Association' (MUTA). The annual events organized by MUTA are open to students providing opportunities to meet the top ranking Alumni in the industry. MUTA provides scholarships to financially needy students on case by case basis and is ever willing to help the undergraduates of the Department.

The department has taken extra efforts in developing the skills and attitudes of students so that the graduate is well rounded and fit for employment. Speech-craft programmes, mentoring, mock interview sessions, industry awareness sessions, attitude building programmes, guest lectures etc. are annually offered to students. Most of these are funded by the industry and the Alumni. The students are expected to enjoy the university life through many opportunities and facilities in sports and recreational activities and have many societies for students to engage in.

The Department is committed to Excellence in Education in all areas of Textile and Apparel Engineering inclusive of Fashion Design and Product Development.

Dr. Nandula D. Wanasekara

Telephone: 94-11-2650301 ext 6001, 94-11-2650623

Fax : 94-11-2651787

Web : www.textile.mrt.ac.lk

E-mail : nandulad@uom.lk

Our Vision

The vision of the Department of Textile and Apparel Engineering is to become a Centre of Excellence in the areas of Textiles, Clothing, Fashion Design and related disciplines through education and knowledge creation.

Our Mission

The mission of the Department of Textile and Apparel Engineering is to provide world class undergraduate teaching, postgraduate research and training to the industry, and consultancy for the benefit of national and international communities. We strive to maintain high standards in all aspects of our work and seek continual improvement of quality in teaching, learning, research and consultancy.

- To enhance current undergraduate programs at the university by continuously updating the curriculum, and to provide a solid basis for all textile related education demanded by the industry.
- To produce new, cross-disciplinary undergraduate and postgraduate programmes through the interaction of other departments.
- To provide state of the art equipment and infrastructure to students, academics and the industry in a world class facility.
- To enhance Information Technology skills in all students
- To build in effective communication skill development in undergraduate programmes.
- To continually improve the academic environment of the Department to become a key facilitator towards social harmony in all its activities.

History of the Department

The University of Moratuwa, situated 18km south of Colombo is the Centre of Excellence for engineering, technological and architectural studies in Sri Lanka. The Department of Textile and Apparel Engineering of the University is one of the Departments in the Faculty of Engineering and is the first of its kind in the Sri Lankan University system.

The Department had its humble beginning in 1976 as a sub-department of the Department of Mechanical Engineering. At that time the course conducted was the National Diploma in Technology course in Textile Technology. Seeing the need for graduates in the industry the Department later began a postgraduate diploma to serve as a conversion course for those graduates from other disciplines employed in the industry.

The Department of Textile & Apparel Engineering came into being as a fully fledged Department in 1985, with the launch of the BSc Engineering Degree Program with the assistance of the Textile Department of the University of Leeds and the Manchester Metropolitan University. In 2001 the Bachelor of Design course came into being, with collaboration from the London College of Fashion of the University of Arts London, a specialist in fashion design education.

The Department of Textile & Apparel Engineering has many “firsts” to its credit:

- first ever BSc Engineering degree in Textile & Apparel Engineering in Sri Lanka.
- first ever degree in Fashion Design in the Sri Lankan University system introduced in 2001.
- first ever testing house providing testing and quality control services and consultancy to the industry.
- first department in the Faculty of Engineering to take in students directly to the Department on entry to the University.

In a comparatively short period of time the Department of Textile & Apparel Engineering has become a trailblazer and the foremost provider of textile education in Sri Lanka.

In addition to academic activities the Department prides itself in its efforts to make an impact on society. The Department has undertaken a number of community service projects, where the staff, both academic and non-academic, students and graduates made visits to provide support in terms of educational material and academic and sports training to students. The students of the BSc Engineering programme have organized a 3 day programme to help the O/L students of Nachchaduwa Sinhala maha vidyalaya by conducting special lessons for 3 major subject areas and also they have organized a programme at Udagama Kanishta Vidyalaya to develop the school facility including creating a new outdoor classroom, renewing the kids play area as well as a shramadhana campaign at the school premises. The students of the B. Design program also carried out a community service project at psychiatric ward “Suwa Mansala” of Aniyakanda Hospital which was in need of help in order to improve the quality of in-house rehabilitate patients’ lives. They have repainted the ward as well as donated many valuable gifts and delicious supper to the patients.

Why study Textile?

Textiles touch today's world in every sphere. The most obvious use of textiles is the clothes we wear, but in addition textiles are found in drapery, upholstery and other furnishings. Going even further, textiles are used extensively in automobiles, aircraft, spacecraft, ships and boats. Medical textiles include a whole range of uses, such as hernia meshes, artificial knee caps and other prosthetic devices, heart valves etc. Textiles are used in the construction industry, as geo-textiles to prevent soil erosion and in diverse other ways.

The Sri Lankan garment industry is the largest export industry in Sri Lanka, with a major portion of the nation's export revenue coming through this industry. The curriculums of both textile engineering and fashion design and product development courses have been tailored to gear the student to face the challenges of this industry with confidence and contribute towards moving our industry on the hi-tech, upmarket route. The industry caters to a worldwide market, and the resulting challenges due to the changes in the global scene, together with the need to integrate information technology, communication and management skills.

Career Opportunities

Being the largest foreign exchange earning industry in the country, the garment industry of Sri Lanka employs over 350,000 personnel. To date the Department has produced more than 1000 graduates, most of whom are gainfully employed in the industry, and making no small contribution to the growth of the industry. There are ample career opportunities for graduates of the Department in the Apparel industry and its related feeder industries. Career opportunities are also available in other textile based industries in the country, and overseas, as well as in quality audit firms and in academia. Graduates holding B.Sc. Engineering in textile & clothing are able to step into any postgraduate degree program in reputed universities worldwide with many of our graduates having obtained postgraduate degrees not only in textile and apparel engineering & management but also in many other areas such as civil engineering, mechanical engineering, computer science.

Why study Fashion Design?

Fashion design is the art of finding inspiration from the most unlikely of sources and turning it into commercially viable and aesthetically appealing pieces of garment to be sold under a brand. The role of Designer is a highly competitive and demanding profession today because of its challenging nature. Success in design will depend on the ability to develop creative, commercial, technical and the other skills that contribute towards expressing individuality and creating identities.

This course aims to develop an understanding of the fashion industry through the principles of creative design research, analysis and the apparel product development of ideas through experimentation in 2D and 3D interpretations. This process involves theoretical, practical, business and entrepreneurship related problem solving while exploring the concepts of fashion design and technology.

In recent years the increased use of technology in production has changed the speed and direction of manufacturing. Undoubtedly, in design the computer and information technology has drastically changed the way of traditional hand-drawing sketches, presentation techniques, draping on mannequins, and product and consumer awareness through internet. Software packages aid designers to visualize products through Augmented reality (AR) and Virtual reality (VR) even before the product are made.

Throughout its four years of course span, the University will provide an inspiring place to root for knowledge, skills and attitudes required in designer career while preparing lifelong learners.

Career Opportunities

Fashion design graduates will have the necessary knowledge, skills and experience to enter the fashion industry within a broad range of opportunities according to personal direction and degree specialism. Graduates will fit into roles of Designer, Patternmaker, Product Developer in addition to taking up careers in Publicity, Photography, Fashion PR, Trend analyst, Buying, Merchandising and Retail Management.

Further, the graduates from this course would qualify for postgraduate studies in any reputed University in Art & Design worldwide.

Department Organisation & Administration

Department Organisation

In the University system the principal officer is the Vice Chancellor. The University of Moratuwa has five faculties, namely Engineering, Architecture, Information Technology, Graduate Studies and Business. Each Faculty has its own Dean, who is responsible for the administrative and academic activities of the Faculty. The Department of Textile & Clothing Technology is part of the Faculty of Engineering and functions under the Head of Department, to whom all other members of the academic and non-academic staff of the Department report. The different courses in the Department function under their respective coordinators/directors.

The Department office is manned by a clerk, a computer application assistant, and assistants, and functions under the direct supervision of the Head of Department. The various laboratories have their individual lecturers in charge, technical officers and laboratory attendants as described under the section on Equipment and Facilities.

Location of the Department

The Department of Textile & Apparel Engineering is located as the last building on the road straight down from the University main gate.

Contact Information

Office

Telephone: 94-11-2640480, 94-11-2650301 ext 6000

Fax: 94-11-2651787

Senior Staff Assistant(Clerical) : Mrs. MVM Fernando

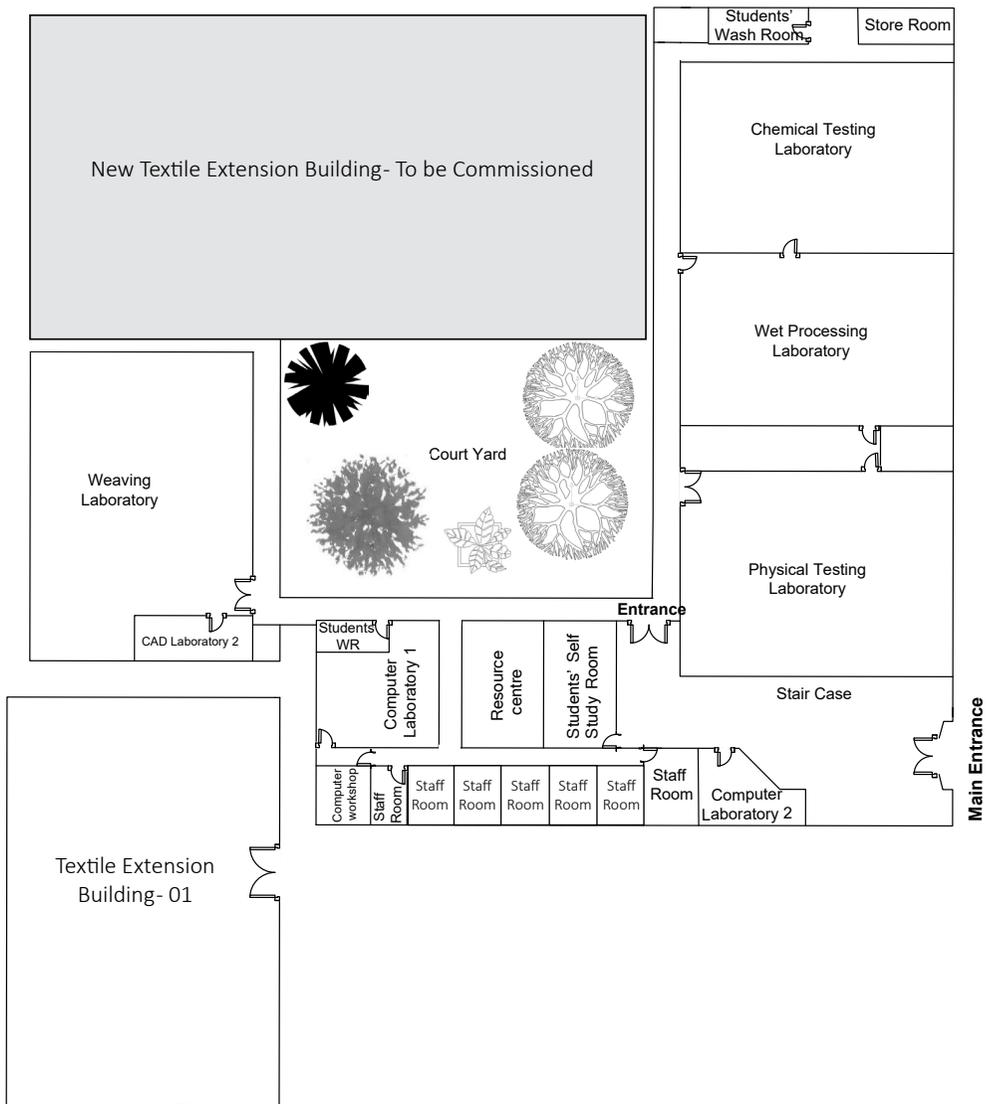
Head of Department

Dr. Nandula D. Wanasekara

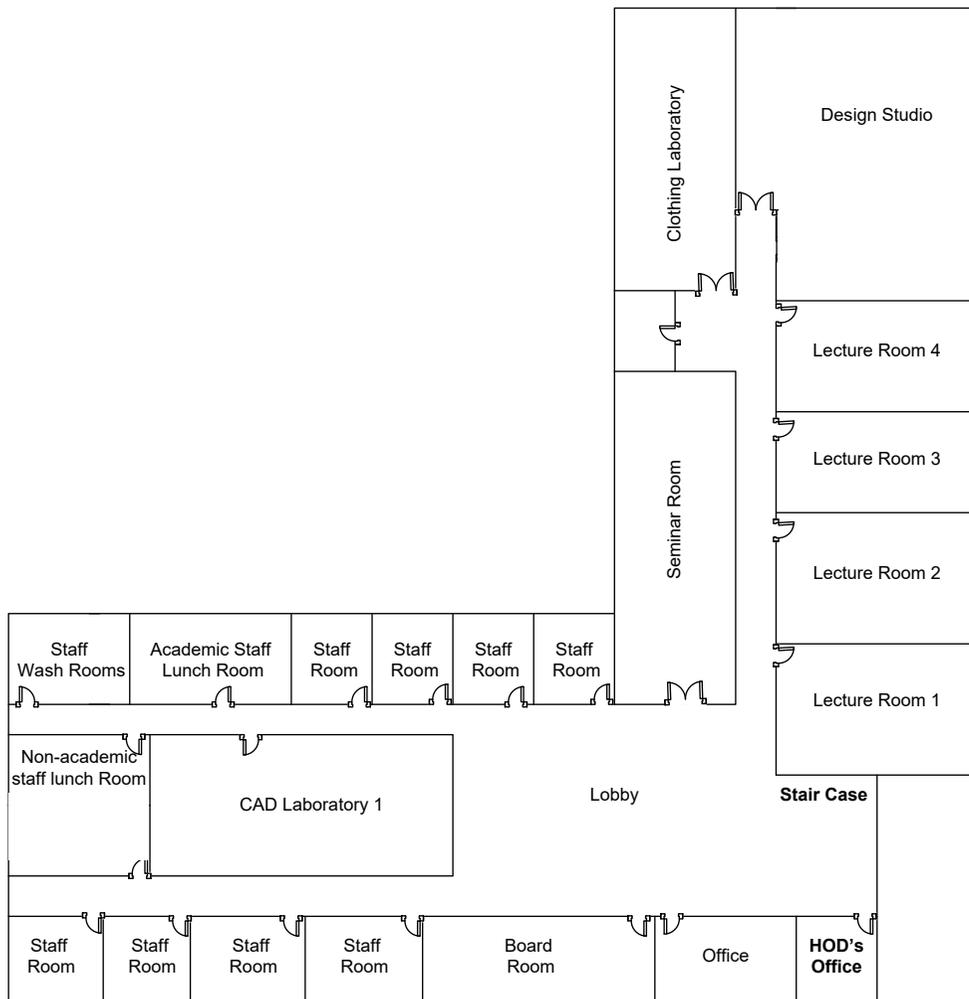
Telephone: 94-11-2650301 ext 6001, 94-11-2650623

Fax : 94-11-2651787

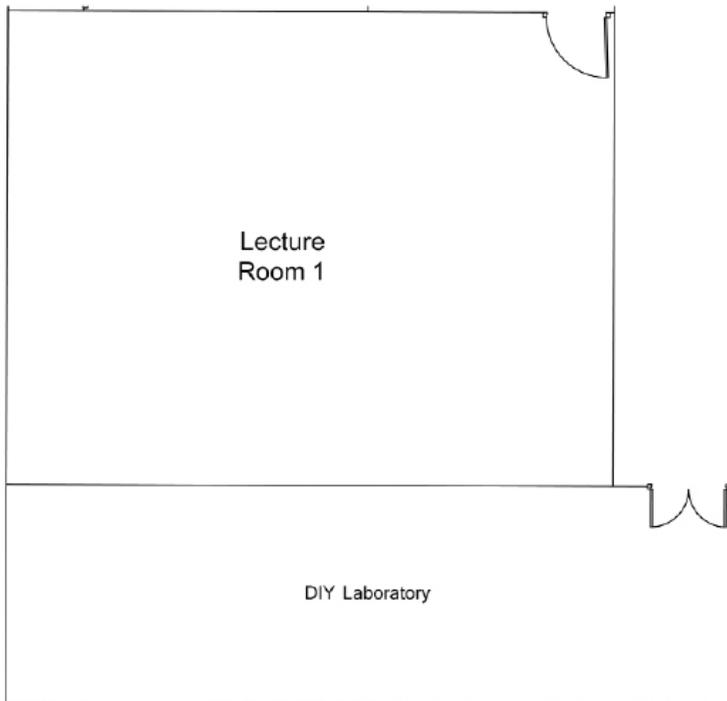
Web : www.textile.mrt.ac.lk



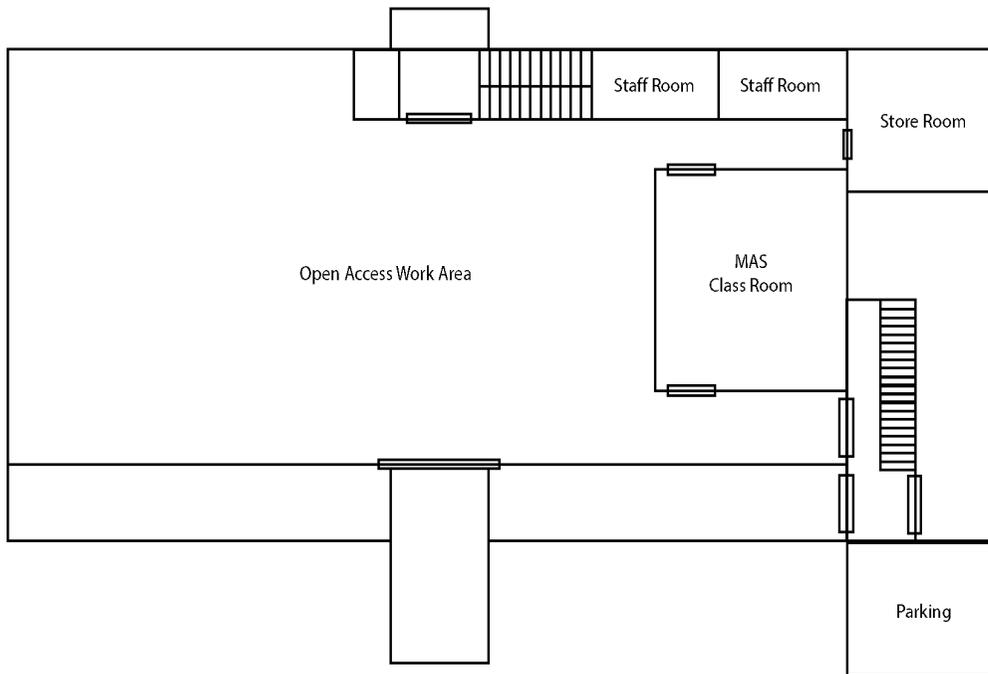
Ground Floor- Main Building of the Department of Textile & Apparel Engineering
 (Floor plan- not drawn to scale)



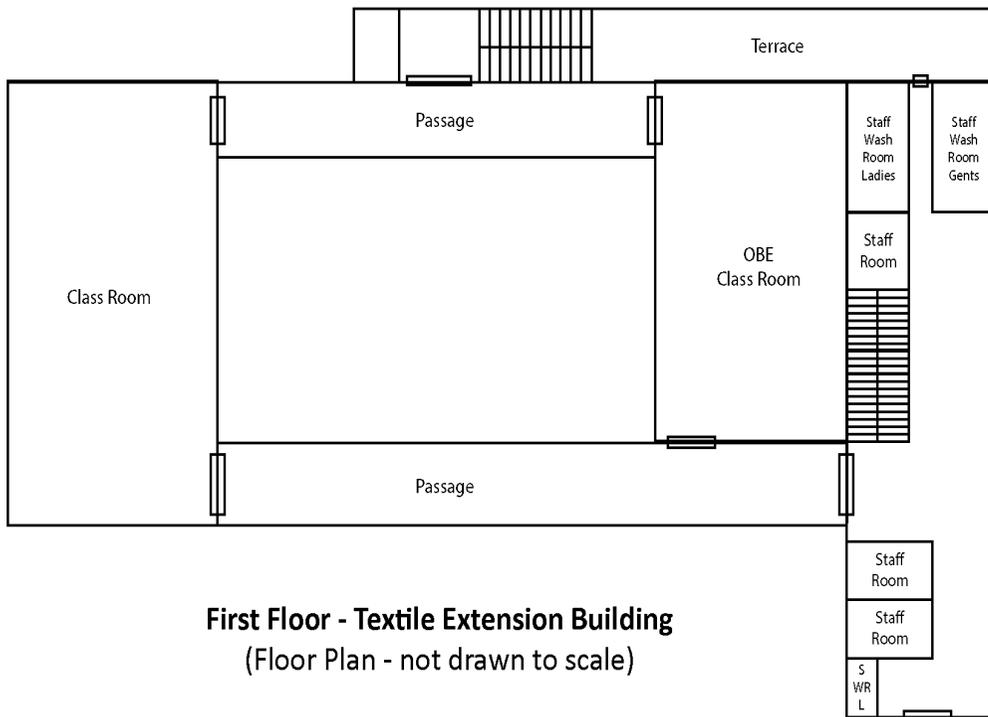
First Floor- Main Building of the Department of Textile & Apparel Engineering
 (Floor plan- not drawn to scale)



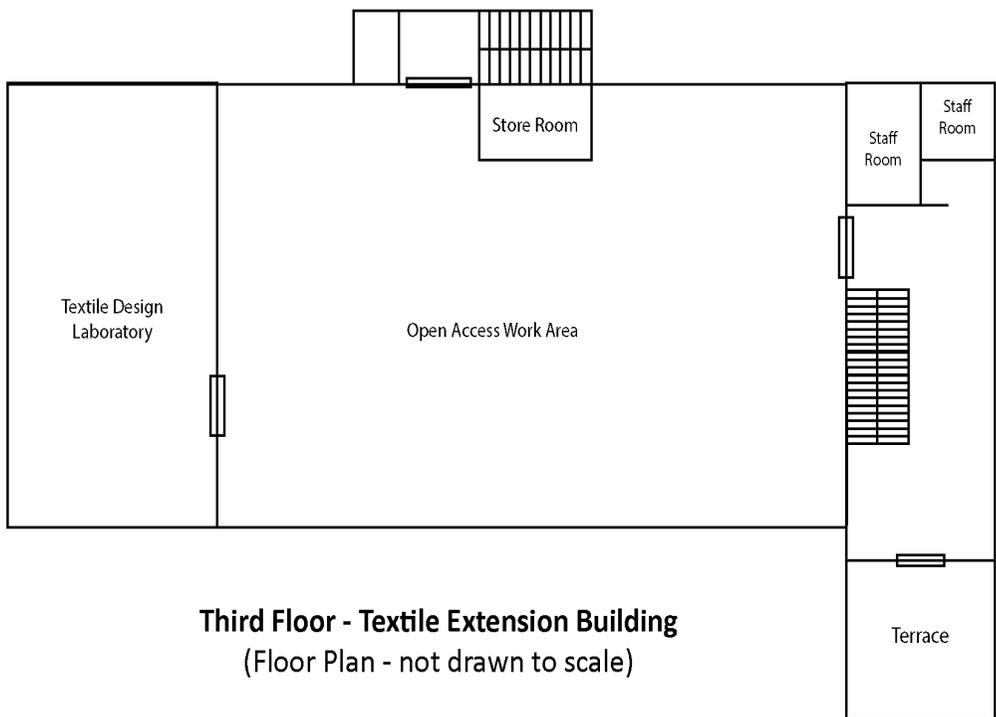
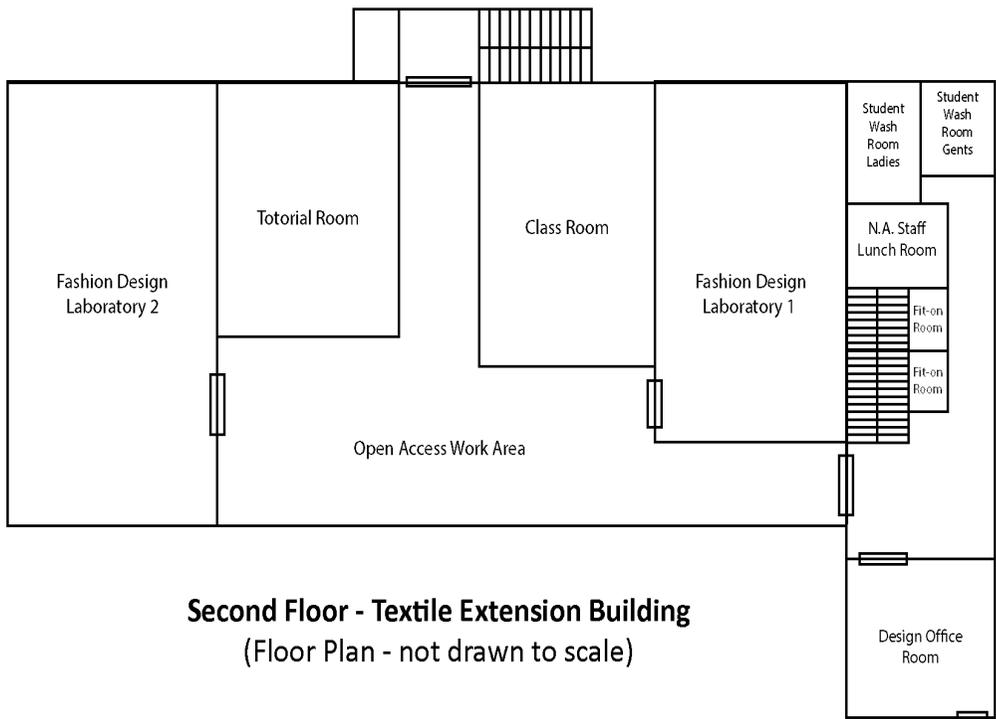
Floor Plan - Textile Old Building
(Floor plan- not drawn to scale)

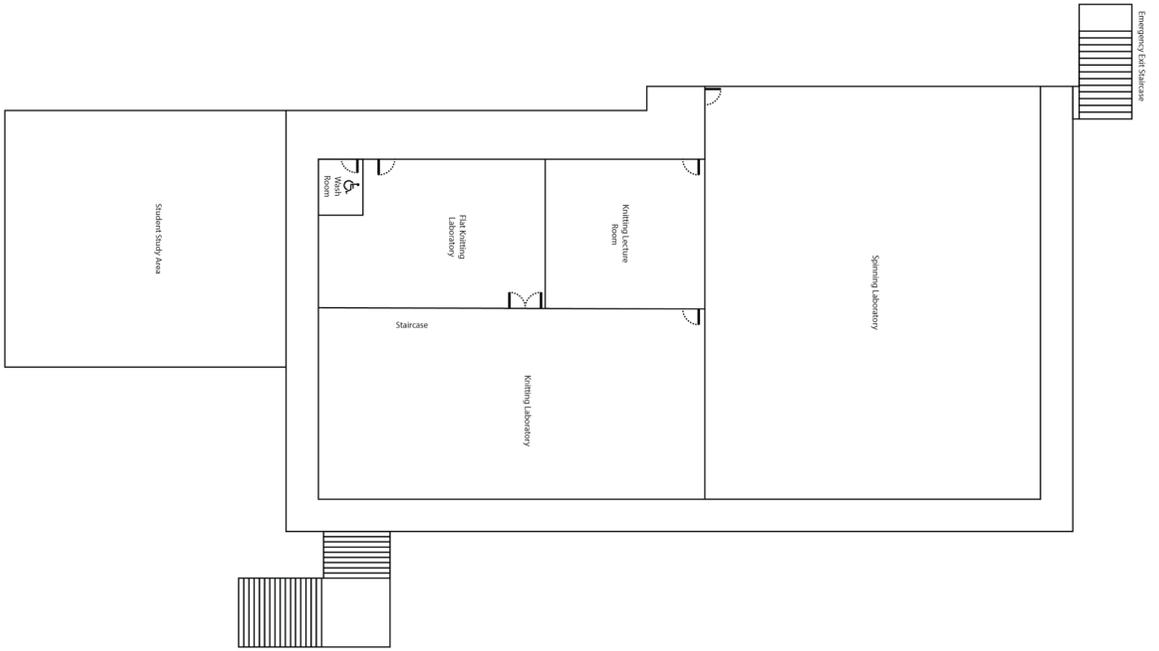


Ground Floor - Textile Extension Building
 (Floor Plan - not drawn to scale)

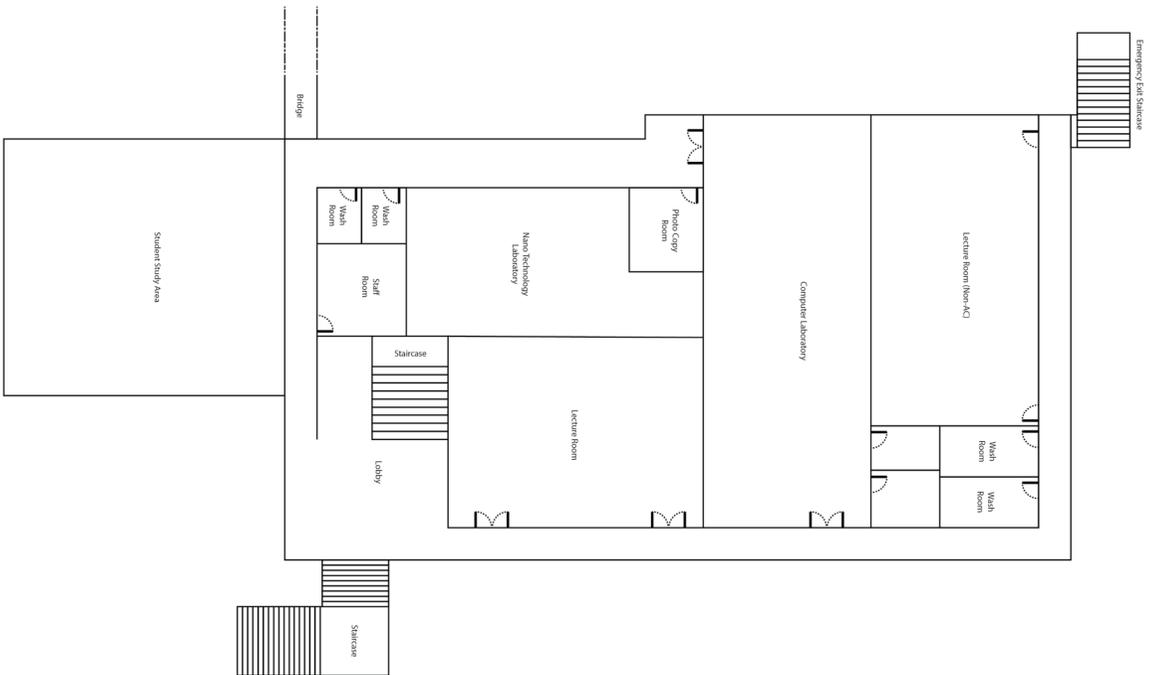


First Floor - Textile Extension Building
 (Floor Plan - not drawn to scale)

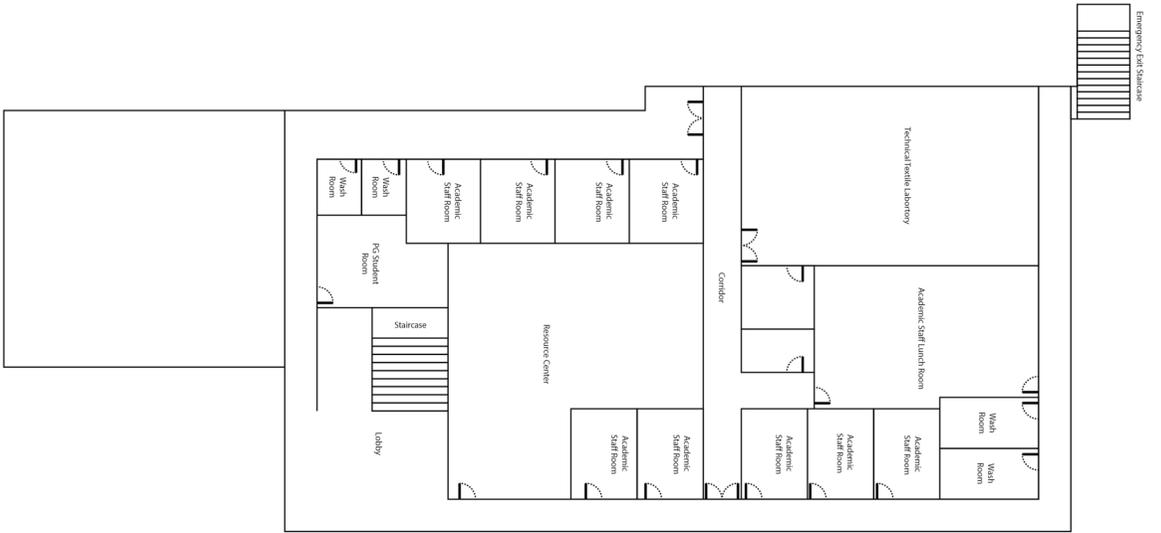




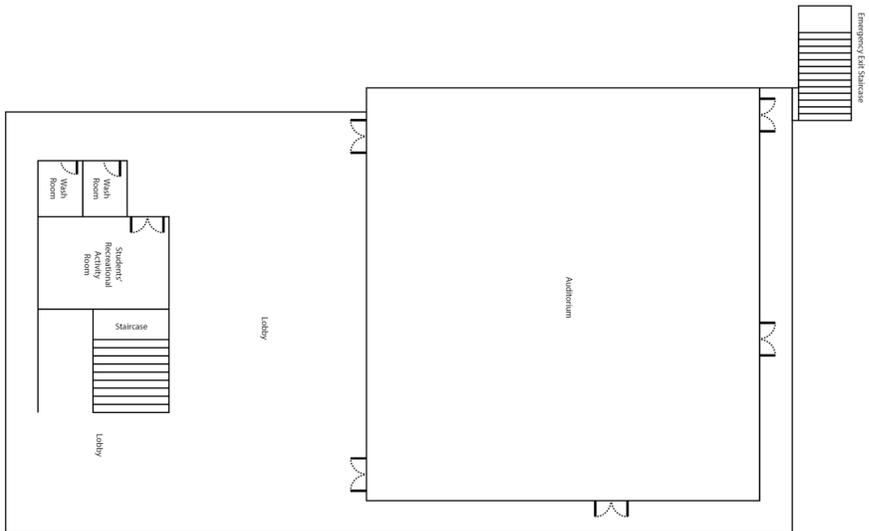
Ground Floor- New Textile Extension Building of the Department of Textile & Apparel Engineering (Floor plan- not drawn to scale)



First Floor- New Textile Extension Building of the Department of Textile & Apparel Engineering (Floor plan- not drawn to scale)



Second Floor- New Textile Extension Building of the Department of Textile & Apparel Engineering (Floor plan- not drawn to scale)



Third Floor- New Textile Extension Building of the Department of Textile & Apparel Engineering (Floor plan- not drawn to scale)

Academic Staff

Head of Department



Dr. NANDULA WANASEKARA, BSc Eng.(Moratuwa), MSc (USA), PhD (USA), CTHE (Kelaniya)

E-Mail: nandulad@uom.lk

Telephone: 2650301 ext 6001

Subject Area: Nanotechnology, Technical Textiles, Polymer Composites

Emeritus Professor/ Founder Head



Prof. LAKDAS D. FERNANDO, BSc Text. Ind. (Leeds), PhD (Leeds), FTI, FCFI

E-Mail: lakdasf@gmail.com

Retired 31 August 2003

Professors



Prof. GLD WICKRAMASINGHA, BSc Eng. (Moratuwa), PhD (Manchester), PG Cert in Teaching (London), MBA (J'Pura), CEng, MIE (SL)

E-Mail: dharmasri@uom.lk

Telephone: 2650301 ext 6031

Subject Area: Yarn Manufacture, Woven Fabric Structures, Textile Management



Prof. SANDUN FERNANDO, MSc Mech. Eng. (Ivanova), PhD (Ivanova), CTex, FTI (UK)

E-mail: sandunf@uom.lk

Telephone: 2640486, 2650301 ext 6028

BSc Eng. Training Coordinator

Subject Areas: Woven Fabric Manufacture, Yarn Manufacture, Textile Machinery, Sewing Machines



Prof.(Mrs.) UG SAMUDRIKA WIJAYAPALA, BSc Eng. (Moratuwa), MPhil (Moratuwa), PhD (Moratuwa), CEng, MIE (SL)

E-Mail: samu@uom.lk

Telephone: 2650301 ext 6035

Subject Area: Textile Processing, Colouration & Finishing, Environmental Management, Color Measurement, Natural Dyes



Prof.(Mrs.) PVM KARUNARATNE, B.A. (Honors) in Fine Arts (Peradeniya), PhD in Integrated Design(Moratuwa), PG Cert (cl-tad)Teaching & Learning in Art, Design & Communication(London), Certificate in Teacher Training Methodology- British Council (Sri Lanka), Certificate in EFL Teacher Training - British Council (Sri Lanka),

E-Mail: virajinik@uom.lk

Telephone: 2650301 ext 6061



Prof.(Mrs.) GAYATHRI RANATUNGA, B A (Hons) Fine Arts (Kelaniya),PhD in Integrated Design (Moratuwa), PGCert (cltad) Learning and Teaching in Arts , Design and Communication (London), Certificate in Teacher Training Methodology, British Council Language Centre, Sri Lanka, Certificate in EFL Teacher Training, British Council Language Centre, Sri Lanka.

E-Mail: gayathrir@uom.lk

Telephone: 2650301 ext 6061

Subject Area: Fashion Design, Art and Tradition

Senior Lecturers



Dr. USW GUNASEKARA, BSc Eng. (Moratuwa), PhD (UMIST), CEng, MIE (SL)

E-mail: ujithe@uom.lk

Telephone: 2640485, 2650301 ext 6016

Subject Areas: Fibre Science, Polymers, Non-wovens, Technical Textiles, Finishing



Dr. WDG LANAROLLE, BSc Eng. (Moratuwa), PhD (UMIST), CEng, MIE (SL)

E-Mail: wilath@uom.lk

Telephone: 2650301 ext 6029, 2650623, 2640481

Subject Area: Knitted Fabric Manufacture & Machinery, Lean Manufacturing.



Dr. NILANTHI HEENKENDA, BSc Eng. (Moratuwa), PhD (UMIST), CEng, MIE (SL)
E-Mail: nilanthih@uom.lk
Telephone: 2640488, 2650301 ext 6034
Subject Area: Pattern Production, Apparel Manufacture, CAD in Apparel Production



Eng. SN NILES, BSc Eng.(Moratuwa), MPhil (Moratuwa), Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo) CEng, MIE (SL)
E-Mail: nils@uom.lk
Telephone: 2640491, 2650301 ext 6010
Subject Area: Textile Testing & Quality, Computer Programming, Yarn & Fabric Mechanics, Technical Textiles, Yarn Manufacture, Color Measurement, Communication skills



Dr. TSS JAYAWARDENE, BSc Eng. (Moratuwa), MSc OR (Moratuwa), PhD (Saga), SMIEEE (USA), CEng, MIE (SL) , CTex, FTI (UK)
E-Mail: jaya@uom.lk
Telephone: 2640491, 2650301 ext 6011
Subject Area: Control Systems, Pneumatics, Operational Research, Automation, Textile Machinery, Robotics and Instrumentation



Mrs. THUSHARI WANNIARACHCHI, BSc Eng. (Moratuwa), MPhil (Moratuwa), PG Cert (CLTAD)Teaching & Learning in Arts, Design & Communication.(London)
E-Mail: thushariw@uom.lk
Telephone: 2650301 ext 6013
Subject Area: Garment Technology, Pattern making
Currently on Study Leave



Mrs. NIROMI SERAM, BSc Eng.(Moratuwa), MA FDT (University of the Arts- London), PG Cert (CLTAD)Teaching & Learning in Arts, Design & Communication.(London), Certificate in Induction Training for Senior Lecturers (OUSL) , Certificate in EFL Teacher Training, British Council Language Center (Sri Lanka)
E-Mail: niromis@uom.lk
Telephone: 2640487, 2650301 ext 6017
Subject Area: Fashion Design, Pattern Cutting, Garment Technology



Eng. VIJITHA RATNAYAKE, BSc Eng. (Peradeniya), PGDip OR (Moratuwa), MPhil (Moratuwa), CEng, MIE (SL)

E-Mail: vijithar@uom.lk

Telephone: 2650301 ext 6033

Subject Area: Apparel Manufacture and Management, Industrial Engineering, Lean Manufacturing, Operations Management, Operations Research



Dr. (Mrs.) AYESHA WICKRAMASINGHE,
PhD (University of the Visual & Performing Arts),
MA FDT (University of the Arts - London), BDes. Hons (Moratuwa),
Accredited Teacher in Higher Education (SEDA-UK), CTHE (Colombo)

E-Mail : ayesha@uom.lk

Telephone: 2650301 ext 6012

Subject Areas: Fashion & Textile Design, Concept Development, Product Development, Sustainable Fashion & Textile Development, Styling and Fashion Curation, Creativity Development



Dr. DGK DISSANAYAKE, PhD(Manchester), BSc Eng. (Moratuwa), Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo), CIMA

E-Mail: geethadis@uom.lk

Telephone: 2650301 ext 6009

Extention Course Cordinator

Subject Area: Sustainable Textile & Fashion, Environmental Management, Apparel Product Development



Mrs. SULARI DE SILVA, BA (Hons), MPhil (Peradeniya,SL), CTHE(Colombo)

E-Mail: sulari@uom.lk

Telephone: 2650301 ext 6026

Subject Areas: History of Fashion, Film Studies, Fashion Journalism



Dr. RIVINI MATARAARACHCHI, PhD(Split-Site), BSc Eng. (Moratuwa), MSc (Moratuwa), PGDip(CIM-UK), Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo)

E-Mail: rivinim@uom.lk

Telephone: 2650301 ext 6014

B.Des. Training Coordinator

Subject Area: Business and Marketing, Product strategy, Production planning and supply chain management



Dr. CP VITANAGE, BSc Eng. (Moratuwa), PhD(Moratuwa), Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo)

E-Mail: padminiv@uom.lk

Telephone: 2650301 ext 6015

Subject Area: Pattern Cutting, Garment Technology, CAD



Mrs. PRATHIBANI MANTHRIRATNE, MPhil (UVPA,SL), BDes. Hons (Moratuwa), Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo)

E-Mail: prathibanim@uom.lk

Telephone: 2650301 ext 6013

Subject Area: Design and Product development in Textile and Fashion, Textile weaving & colour theory, Fashion concept development, Technical drawings



Dr. RANGA ABEYSOORIYA, BSc Eng.(Moratuwa), MSc Industrial Mathematics (J'pura), PhD Operational research (Southampton) CTHE (Colombo), AMIE(SL), MIAENG

E-Mail: rangaa@uom.lk

Telephone: 2650301 ext 6030

Subject Area: Operational Research, Production and Operations Management, Applied statistics, Optimization in Cutting and Packing



Dr.(Mrs.) RK JAYAMALI DE SILVA, PhD, BSc Eng. (Moratuwa), PGDip (CIM,UK), Accredited Teacher in Higher Education (SEDA-UK), CTHE (Colombo)

E-Mail jayamalide@uom.lk

Telephone: 2650301 ext 6022

Subject Area: Apparel Product Development, Virtual Prototyping, Garment Technology, VR and AR Applications in Apparel Industry



Dr. RASC GOPURA, PhD (Australia), MA (UK), BDesign (Moratuwa), CTHE (Colombo), SEDA(UK)

E-Mail: sumithg@uom.lk Telephone: 2650301 ext 6404

Subject Area: Fashion knowledge, Fashion design practice, Apparel industry, Teaching and learning in higher education



Dr. GAYANI K. NANDASIRI, PhD (NTU, UK), Bsc Eng (Moratuwa), CIMA (Passed Finalist), Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo)

E-Mail: gayanin@uom.lk

Telephone: 2650301 ext 6036

Subject Area: Medical Textiles, Modern Finishing Techniques, Smart Textiles, Knitting technology, Nano Technology, Colouration and Finishing



Dr. H.R. ACHINI THARAKA RANAWEERA, PhD(QUT, Australia), BDes.Hons (Moratuwa), MA (London), (FHEA, UK), Accredited Teacher in Higher Education (SEDA-UK,CTHE-Colombo)

E-Mail: achinir@uom.lk

Telephone: 2650301 ext 6014

Subject Area: Consumer Behaviour Marketing, Design Issues in Marketing

Lecturers



Mr. KUS SOMARATHNA Bsc Eng. (Moratuwa), CIMA, Accredited Teacher in Higher Education (SEDA-UK), CTHE(Colombo)

E-Mail: udaras@uom.lk

Telephone: 2650301 ext 6053

Subject Area: Quality Improvements in Processes, Lean Manufacturing, Operations Management, Reliability Engineering.
Currently on Study Leave



Mr. PRABOD DHARSHANA MUNASHIGHE, BDes.Hons(Moratuwa), Teacher in Higher Education (SEDA-UK), CTHE(Colombo)

E-Mail: prabodm@uom.lk

Telephone: 2650301 ext 6014

Subject Area: Design & Product Development in Fashion/Textile, CAD/ CAM, Smart Textiles and Fibers
Currently on Study Leave



Ms. VITHURSHA VIJAYARAJAH
BSc Eng (Moratuwa), CTHE (Kelaniya)
E-Mail: vithurshav@uom.lk
Telephone: 2650301 ext 6018
Subject Area: Woven Fabric Structures, Testing and Quality,
Coloration and Finishing



Mr. MGC CHINTHAKA DHARMAKEERTHI
BDes.Hons FDPD(Moratuwa), PGDip Marketing(SLIM), Accred-
ited Teacher in Higher Education (SEDA-UK), CTHE(Colombo)
E-Mail: chinthakad@uom.lk Telephone: 2650301 ext 6013
Subject Area: Fashion Design, Visual Research Methodology,
Textiles for Design, Design and Product Development in Fashion
/Textile



Mr. PHILIP R. FERNANDO
BSc Eng. (Moratuwa), MSc (Moratuwa-reading)
E-Mail: philipf@uom.lk
Telephone: 2650301 ext 6018
Subject Area: Woven Fabric Manufacture, Knitted Fabric Manu-
facture, Colour Measurement, Yarn Manufacture



Mr. TGYS PERERA
BSc Eng. (Moratuwa)
E-Mail: yasiths@uom.lk
Telephone: 2650301 ext 6018
Subject Area: Principles of Yarn Manufacture, Advanced Yarn
Manufacture, Instrumentation and Programming for Automation



Mr. RMHW MUWANWELLA
BSc Eng. (Moratuwa), BIT (UCSC-reading)
E-Mail: himalm@uom.lk
Telephone: 2650301 ext 6018
Subject Area: Colouration and Finishing of Textiles

System Analyst



Mr. NADUN PERERA, BIT (Colombo), PG.Dip (NSBM), CCNA,
MCSA, MCITP, VCA
E-Mail: nadunp@uom.lk
Telephone: 2650301 ext 6014

Non-Academic Staff

Chief Technical Officer



Mr. GHD Wijesena

Staff Technical Officers



Mr. CP Malalanayake



Mrs. DMDS Dissanayake



Mr. HM Senevirathne



Mrs. SWNA Samaraweera



Mrs. BADIU Bogoda

Audio Visua Technical Officer



Mr. UT Dodampegamage

Technical Officers



Mr. JA Chinthaka



Mrs. IS Disapali



Mr. HMRPB Herath



Ms. HSK Nilmini



Mr. BTR Bulathsinhala

Senior Staff Assistants (Clerical)



Mrs. MVM Fernando

Computer Application Assistant



Mr. ULB Perera

Machinist



Mr. SA Gnanarathna

Laboratory/Support Staff



Mr. D Jayasiri



Mr. R P U S Senarathne



Mr. JPS Silva



Mr. HH Nishantha



Mr. KDTA Kumara



Mr. PGC Wiranjeewa



Mr. AU de Silva



Mr. KU Murage



Mr. WMRPN Gamage

Vehicle Staff



Mr. A Udayashantha
(Driver)

Laboratory Facilities

The Department of Textile & Apparel Engineering contains twelve laboratories which are equipped with state-of-the-art machinery and equipment. These laboratories help students to carry out the necessary practical work and research related to their studies. A brief overview of the laboratories is given below:

Spinning Laboratory



The spinning laboratory houses a range of spinning machines. Students are given hands on experience on these machines, which cover the spinning preparatory, spinning and finishing stages of yarn manufacture.

Lecturer in charge: Dr. N Wanasekara
Technical Officer: Mr. JA Chinthaka
Laboratory Attendant: Mr. D Jayasiri



Weaving Laboratory

The weaving laboratory is equipped with machinery used for weaving preparation, as well as a number of looms of shuttle, rapier, air jet and water jet types. These machinery were obtained under a JICA grant.

Lecturer in charge: Prof. EASK Fernando

Technical Officer: Mr. HMRPB Herath

Laboratory Attendant:

Mr. RPUS Senarathne



Knitting Laboratory



The knitting laboratory is equipped with Shima Seiki flat bed knitting machine, Hand flat knitting machines and multi-feeder circular knitting machines. One circular knitting machine and a flatbed knitting machine were provided under the ADB Science and Technology Personnel Development Fund.

Lecturer in charge: Dr. WDG Lanarolle

Technical Officer: Mr. BTR Bulathsinhala



Physical Testing & Quality Control Laboratory



This laboratory is one of the busiest in the Department, serving students of both degree programmes for practical classes as well as testing work related to projects, assignments and research. The laboratory is equipped with two universal tensile testing machines and several modern equipment.

Lecturer in charge: Dr. Gayani K. Nandasiri
Technical Officer: Mrs. DMDS Dissanayake
Lab Attendant : Mr. KDTA Kumara

Wet Processing Laboratory



The wet processing laboratory is equipped with a range of dyeing and printing machines. This laboratory is also used extensively by students for project and research work. Under the ADB Science and Technology Personnel Development Project the equipment was further enhanced by a number of modern hi-tech colour fastness testing machinery.

Lecturer in charge: Prof. UGS Wijayapala
Technical Officer: Mr. CP Malalanayake
Lab Attendant : Mr. KDTA Kumara



Chemical Testing Laboratory

This laboratory is used by students from Level 1 itself for a range of subjects related to textile fibres. Facilities include electronic microscopes, rotational viscometer and extracting machines. The laboratory is also used extensively for project work. Some practical classes for students of other departments are also undertaken in this laboratory.

Lecturer in charge: Dr. USW Gunasekara
Technical Officer: Mr. CP Malalanayake
Lab Attendant : Mr. KDTA Kumara



Clothing Laboratory



The clothing laboratory is equipped with more than 50 industrial sewing machines of different types. In addition there are different types of cutting machines and a fusing machine. A model of an Eton material handling system is also available. The laboratory is heavily used by students of all courses for the practical classes in garment manufacture and equipment technology, and for project work.

Lecturer in charge: Mrs. Vijitha Ratnayake

Technical Officer: Mr. HM Seneviratne

Laboratory Attendant: Mr. JPS Silva



Design Studio

The Design studio provides all the facilities to learn how to interpret a sketch or photograph of a simple design, and to drape and produce a pattern for it. The laboratory is equipped with all the equipment used for pattern developments and students are provided with 'hands on' experience on using French curves, grade rulers, tape measures, pattern notches, tracing wheelers etc. Dress stands are available for students to drape and observe the visual effect of their patterns.



Lecturer in charge: Dr. Nilanthi Heenkenda

Technical Officer: Ms. HSK Nilmini

Laboratory Attendant: Mr. JPS Silva

Computer Laboratories

The Computer Laboratories of the Department are widely used by students for academic activities. The original laboratory was established in 1991 with a donation from the Government of the Federal Republic of Germany to upgrade the level of Information Technology in the Department.

The Computer Laboratory is linked to all staff rooms and laboratories of the Department via the Departmental intranet, and provides internet and email, centralized printing and data communication facilities within the Department. The main student Laboratories are equipped with about 65 workstations, printers and scanners. All workstations have facility for browsing the internet and some others are limited to application software.

Lecturer in charge: Dr. TSS Jayawardene
Technical Officer: Mr. GHD Wijesena
Lab Attendant : Mr. HH Nishantha



CAD Laboratory 1- (Gerber)



The CAD Laboratory was set up in 2003 with the assistance of the ADB Science & Technology Personnel Development Project. The CAD system was supplied by the Gerber Garment Technologies Ltd., a leading provider of CAD support to the local garment industry.

The laboratory is one of its kind in the island that is equipped with all the necessary facilities to train fifteen individuals at a time.

The laboratory is equipped with 15 workstations with 12 scanners, 2 colour laser printers, 2-meter wide plotter, inkjet printer, digitiser table and a multi media projector.

Lecturer in charge: Dr. RKJ De Silva

Technical Officer: Ms. IS Disapali



CAD Laboratory -2 (Lectra)

Lectra is a world leading integrated technology solution software with CAD/CAM equipments, specifically designed for industries using fabrics, leather, technical textiles, and composite materials to manufacture their products. The CAD system in this laboratory was donated by Lectra International, the leading provider of CAD support to the garment industry.

The laboratory is equipped with all the necessary facilities to train 16 individuals at a time. The laboratory is equipped with 16 workstations with necessary CAD software.

Lecturer in charge: Prof. EASK Fernando

Technical Officer: Mr. HMPRB Herath



Fashion Design Laboratory -1 (Textile Extension Building)

This laboratory is equipped with facilities required for pattern production and sewing machines for making prototypes.

Lecturer in charge: Dr. CP Vithanage

Technical Officer: Mrs. SWNA Samaraweera

Lab Attendant: Mr. KU Murage

Labourer: Mr. MRGK Abeyrathne



Fashion Design Laboratory -2 (Textile Extension Building)

This laboratory is equipped with sewing machines for making prototypes and the facilities required for pattern production.

Lecturer in charge: Dr. RKJ De Silva

Technical Officer: Mrs. BADIU Bogoda

Lab Attendant: Mr. KU Murage

Labourer: Mr. MRGK Abeyrathne



Textile Design Laboratory (Textile Extension Building)

This laboratory is equipped with facilities required for Weaving, which includes Table looms and computerized Technology

Lecturer in charge: PAPH Manthirathne

Technical Officer: Mrs. SWNA Samaraweera

Labourer: Mr. MABS Perera

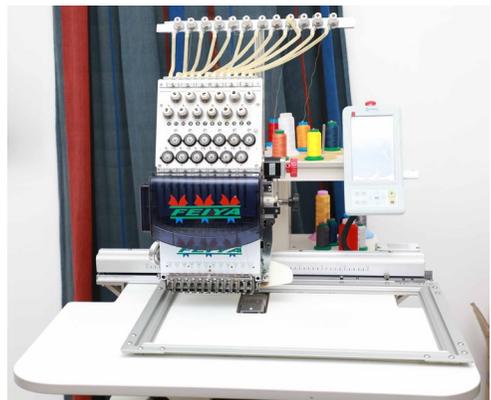


Special Machinery (Textile Extension Building)

Laser Cut Machine



Embroidery Machine



DIY Laboratory

“DIY” stands for Do It Yourself. Basic intension of development of this laboratory to provide hands on experience on design projects done under module TT 1963 Engineering Skill Development . It will be further used in conducting laboratory classes in TT 3262 Instrumentation and Programming for Automation module.

DIY laboratory basically comprising of two segments namely electronic work space and mechanical workshop. Electronic work space has two work benches facilitating four stations to work. It also equipped with electronic multi-meters, storage oscilloscopes, signal generators, DC regulated power supply, computer workstation equipped with simulation software (multisim), toolkits and furniture. Mechanical workshop equipped with a lathe machine, heavy duty work bench with a vice, a angle grinder, bench drilling machine, portable drilling equipment and many other gigs and tools.

Depending on the necessity of the students, the laboratory is planned to be open for the students after hours.

Lecturer in charge: Dr. Ranga Abeysooriya

Technical Officer: Mr. HMPRB Herath

Machinist: Mr. SA Gnanarathna



Other Facilities

Student Common Room, Reading Room

The Student Common Room is located on the ground floor (Room 101) of the main building of Department. This room is used by students for general purposes including study and discussion. Students are requested to keep this room clean and tidy at all time, switch off the fans and lights when not in use, and refrain from consuming food or drink there.

LRC (Learning Resource Center)

The LRC is located on the ground floor (Room 108) of the main building of Department. LRC is developed under the Quality and Innovation Grant from World Bank. It contains traditional educational resources such as books, journals, as well as modern learning facilities such as software and audio/visual materials. The expectations of Learning Resource Centre are to promote self study, discussions and usage of multimedia faculties for education.

Department Vehicles

The Department has its own bus and a van, which are used for official visits to factories and other places pertaining to academic work.

Lecture Rooms

The Department has four lecture rooms which can accommodate about 50 students each, as well as one larger lecture room in the old building. All of these rooms are equipped with multimedia facilities. Lecture rooms suitable for smaller groups are also found in the weaving laboratory.

Auditorium

The Department has an auditorium capable of accommodating 160 individuals. The auditorium has multimedia facilities, and is used for normal lectures, guest lectures and for special programs of the Department and of student societies.

Textile Extension Building

The Textile Extension Building is equipped with two design studios, lecture/workshop room and two tutorial rooms on its first floor and planning on students' self directed study areas, resource center and staff rooms to be on the first and second floors.

New Textile Extension Building

The new Textile Extension Building is equipped with an auditorium of 300 seating arrangements, New OBA model class rooms, computer lab equipped with modern computer facilities, and technical textile and smart textile laboratories.

Central Facilities

The central library of the University provides the main library facility to the students. Around 450 students can be accommodated in the reference and reading sections. A large number of textbooks and journals are available for borrowing and reference.

A central computing facility is also currently housed in the library. Students may also find different areas for study purposes on different parts of the campus.

In addition to the above a medical centre is available with two doctors in attendance during working hours. All registered students of the University are eligible to meet the doctors and receive treatment and medication. Cases which cannot be handled by the centre will be directed to a hospital.

General Policy regarding the use of Facilities

1. The facilities of the Department are for the use of the entire Department, and students are requested to use them responsibly without disturbing others.
2. Please refrain from loitering in corridors during lecture hours and disrupting other lectures that are going on.
3. Consumption of food or drink within lecture rooms, laboratories or the student common room is strictly prohibited.
4. Please switch off all mobile phones during lectures and laboratory classes. If you are expecting an urgent call please place your phone on silent mode and leave the room if you need to answer the call.
5. Please note that caps should be removed while in the laboratory or lecture room.
6. Computers should be used for authorised purposes. The use of computers for the purpose of viewing or downloading unacceptable material, such as pornography, gambling etc. are strictly forbidden, and strict action will be taken against students violating this.
7. Laboratory facilities are used for practical classes. If these facilities are required for projects or assignments outside of these scheduled classes, a letter requesting these facilities should be sent through the lecturer assigning the projects. All equipment should be used under the guidance of an authorised member of the staff.
8. Working hours of the Department for academic purposes are from 8:15 am to 4:15 pm on weekdays. Additional work may take place after hours or on weekends.

Moratuwa University Textile Association (MUTA)

The Moratuwa University Textile Association is the alumni association of the Department. All graduates, undergraduates and permanent staff of the Department are eligible for membership. Student membership fee is Rs. 100/= per year. The life membership fee is Rs. 3000/=. MUTA acts as a forum for its members, to widen the interest and the knowledge of the members and to enhance social interaction.

MUTA has contributed immensely to the welfare of the students by regularly organising guest lectures on topics of interest, mentoring programs, speechcraft programs, orientation programme and mock interviews for students preparing for industrial training. MUTA also financially supports few BSc Engineering students every year. All students are encouraged to obtain membership of MUTA.

For further details contact Eng. SN Niles.

Textile Engineering Student Society (TESS)

The Textile Engineering Student Society is the student association of the BSc Engineering students of the department which was inaugurated in 2010. All BSc Engineering students of the Department are eligible to be members of TESS.

For further details contact Dr. DGK Dissanayake.

Fashion Design Student Society (FDSS)

The Fashion Design Student Society is the student association of the B.Design in Fashion Design & Product Development students of the Department which was inaugurated in 2015. All Bachelor of Design students of the Department are eligible to be members of the Society.

For further details contact Dr. PVM Karunaratne, Senior Treasurer of the Society for the year 2018.

Degree Programmes & Administration

The Department of Textile & Apparel Engineering of the University of Moratuwa offers two degree programmes: the BSc Engineering degree in Textile & Apparel Engineering, and the BDes Degree in Fashion Design & Product Development. Both these programs have been formulated with the needs of the Apparel and Textile Industry in mind, and periodic revisions are made to keep the courses relevant to the industry, as well as to provide students with a well-rounded education that will enable them to meet the challenges they would have to face in the working world.

For both degree programmes, students are admitted directly to the Department on the basis of the Z-score at the GCE Advanced Level examination. In addition, an aptitude test is held for the BDes degree programme.

BSc Engineering Degree Programme

The BSc Engineering degree is a four year degree programme running according to a modular system. Each year of study is roughly divided into two semesters. During Semesters 1 & 2 the student learns the fundamentals of engineering in common with students of other disciplines, but with a few textile specific modules as well. In Semester 2 the students are also given opportunities to hone their practical engineering skills and to carry out an engineering design project. In addition, an Industry Orientation program is carried out, where the student spends few days in an industrial plant and obtains an introductory exposure to the textile and apparel industry.

In Semesters 3 & 4 the students receive instruction in fundamentals of textile processing and apparel manufacture, together with a module in computer programming and a number of mathematics and general engineering modules. Semester 5 builds on the foundation already laid, with aspects of management and quality control being taught as well. It is at this point that students begin to specialise in their chosen stream.

Students undergo a 6-month industrial placement, where they gain practical experience in a leading textile or garment manufacturing concern. Following this is a short semester 6 (semester 6), where students take a fewer number of course modules.

In Semesters 7 & 8 students focus their learning based on the knowledge gained in the previous years as well as the experiences obtained during industrial training, and also carry out a final year project which is supervised by an academic staff member, as far as possible on industry-specific problems. The project is usually multi-disciplinary in nature.

A total of 150 credits are required to successfully complete the degree, of which a minimum of 135 accounts from GPA modules, and a minimum of 12 from non-GPA modules.

Vision of the BSc Engineering Degree Programme

To be the most sought after degree programme in Textile and Apparel related disciplines.

Mission of the BSc Engineering Degree Programme

- To provide competent well-rounded graduates for the benefit of national and regional communities.
- To maintain high standards and be subjected to continuous improvement in all aspects of teaching and learning.
- To produce graduates who excel in up to date knowledge, relevant skills and positive attitudes.

B.Design Degree Programme

The B.Design course runs under a yearly system. Entry to this course is administered by the UGC and the eligibility requirements are published in the UGC Handbook. The minimum requirement to be admitted to this course is good GCE A Level results and a knack for creativity and interest in Design.

The University of Moratuwa holds an Aptitude Test in an attempt to evaluate the creative thinking abilities of the applicants. Thereafter the selection of candidates are carried out by the UGC through the prevailing University selection method.

The annual intake to this degree programme is 50. Tuition Fees are not charged but is usually termed as 'expensive' because of the course demands such as materials, technology, visiting exhibitions and trade shows and study tours.

At University the FOUR years comprise of the following:

Year 1 - Introductory - Foundation & Experimental

Year 2 - Exploratory & Developmental

Year 3 - Industrial Placement - In industry under guidance

Year 4 - Definitive - Final year individual collections development for graduation Fashion Show

Subjects included and incorporated to the programme throughout the 4 years are;

- Visual Studies
- Fashion & Textile Design
- Product Development & Garment Technology
- Pattern Cutting, Grading, fit & styling
- Garment Construction
- Textile Technology
- ICT, Cad Cam, Photoshop, Illustrator, Flash and other software
- Introduction to the Fashion Business – Buying, Marketing, Merchandising
- Production, Supply Chain, Sourcing and Global Strategies.
- Fashion Forecasting, Consumer Studies
- Historical and Cultural Studies
- English Language for Communication
- Personal Professional Development (PPD)

On completion of the course the student is expected to enter a broad range of Fashion industry related employment, fashion entrepreneurship or pursue higher studies at postgraduate level.

Graduates from this programme are able to demonstrate a sound understanding of the Fashion industry, both Fashion Product and Process, and deploy critical and analytical problem-solving skills in relation to both aesthetic and commercial aspects of the Fashion and related product. They are also able to demonstrate an ability to confidently and effectively express their ideas through visual, verbal and written media.

Graduation Fashion Show

The B.Design Degree in Fashion Design & Product Development celebrates the work of its' graduating batches of students each year with their catwalk collections.

Each collection is designed to a theme and comprises of six complete brand new outfits, developed during the final year of the degree. The collections are based upon in-depth research of a particular market and a customer. The research begins with a strategic proposal to identify a particular label, designer or market segment. The outcome of research leads to develop a brand new idea to a wearable design by solving problems related to manufacturing, pattern development, and design development to achieve the final collection of outfits.

Graduation Fashion Show 2019 Collections



Graduation Fashion Show 2019 Collections



GRADUATION
FASHION
COLLECTION
2018/2019

Graduate Profile of a Textile Engineering Graduate

1. Apply knowledge of mathematics, basic sciences and engineering fundamentals to the analysis of complex engineering and technological problems in the textile and apparel industry.
2. Identify, investigate and analyse complex textile engineering and technological problems, research literature and formulate solutions, and reach substantiated conclusions.
3. Design systems, components and processes as solutions for textile engineering problems.
4. Conduct investigations of complex problems using research based knowledge and research methods.
5. Create, select and apply appropriate techniques, resources, and modern engineering and IT tools to complex engineering activities.
6. Assess societal, health, safety, legal, cultural and environmental issues related to professional engineering solutions.
7. Demonstrate broad knowledge of sustainable development concepts and practices required for dealing with contemporary issues related to professional engineering practice.
8. Demonstrate broad knowledge of ethical responsibilities and professional standards.
9. Demonstrate ability to function effectively as an individual and in multidisciplinary and multi cultural teams, with the capacity to be a leader or manager as well as an effective team member.
10. Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Demonstrate broad knowledge of management and business practices, including financial management, risk and change management.
12. Engage in independent and lifelong learning in the broad context of technological change.

Graduate Profile of a Fashion Design & Product Development Graduate

On completion of the course the student should be able to,

- Demonstrate a sound understanding of the Fashion industry, a knowledge of both Fashion Product and Process.
- Demonstrate a high level of competence in specialist area.
- Deploy critical and analytical problem-solving skills in relation to both aesthetic and commercial aspects of the Fashion and related product industry
- Demonstrate an ability to confidently articulate their ideas effectively through the use of visual, verbal and written media
- Demonstrate the ability to apply the knowledge and skills acquired to new and varied situations which are to be encountered in the changing world of the Fashion industry
- Ability to assess personal, intellectual and professional capabilities and strengths in order to identify and plan areas of further personal development and progress.

The student is expected to enter a broad range of Fashion industry related employment, self-employment or pursue higher studies at postgraduate level.

Course Administration

Courses in the Department function under various course coordinators, who are responsible for the administration of the respective courses at the given levels, and who report to the Head of Department. The course coordinators are as follows:

BSc Engineering Degree Program

| | |
|----------------------|-------------------------|
| Semester 1 & 2 | Dr. Geetha Dissanayake |
| Semester 3 & 4 | Mrs. Vijitha Rathnayake |
| Semester 5, | Prof. Sandun Fernando |
| Industrial placement | Prof. Sandun Fernando |
| Semester 6 | Dr. Ranga Abeysooriya |
| Semester 7 | Dr. RKJ De Silva |
| Semester 8 | Dr. USW Gunasekera |
| Project Coordinator | Dr. Gayani K. Nandasiri |

BDes Degree Program

| | |
|-------------------------|-------------------------------|
| B.Design Degree Program | |
| Year 1 | Dr.(Mrs.) HR Achini Ranaweera |
| Year 2 | Mr. PD Munasinghe |
| Year 3 | |
| FIIS: | Dr.(Mrs.) CP Vithanage |
| Industrial Training: | Mrs. WKD Thushari |
| Year 4 | Mrs. Prathibani Manthirratne |

The above staff members also function as academic advisors for the respective courses.

Teaching and Learning

All classes in the Department, as well as the time table, have been structured to help the student to get the optimum benefit.

At the beginning of each module the student will be provided with the syllabus and Learning Outcomes of the module, so that he/she can structure his/her learning accordingly. Visual aids, printed lecture notes and other teaching material are used. Some lecturers will make their notes available on the Department Intranet for access by students.

Please note that what takes place at the lecture is important, and on no account should students attempt to stay away from lectures and do only with the lecture notes. Students should also supplement their lecture notes by self-study, referring to materials in the library and on the internet, and by checking out practical aspects for themselves in the laboratories. Students are also encouraged to ask questions in class, and to meet the lecturer or instructor to clarify any doubts. Students who do not attend classes will not be allowed to submit in-class assignments for classes they have missed.

Examinations & Assessment Strategy

All students are required to achieve a minimum of 80% attendance at all classes. However, students are advised that in the case of some modules, particularly laboratory classes, 100% attendance may be required for the student to get sufficient marks.

Continuous assessment carries 30% upwards of the final mark for the BSc Engineering examinations. This means that all tutorials, assignments and laboratory work should be completed and submitted, and a required grade obtained. Students are expected to obtain minimum of 35% from both continuous and end semester examination to pass a course module. Continuous assessment may take the form of practical reports, viva, spot tests and quizzes, assignments and oral presentations. Assessment criteria may differ for different modules, and it is the student's responsibility to ensure that he/she meets the criteria for each module. Late submissions may be penalised or even rejected.

Students who have medical or other problems are requested to contact an academic advisor at the earliest opportunity and work out some solution with regard to academic activities. All such solutions should be according to recommended University procedures.

Mentoring & Development

At present the Department, in collaboration with its alumni association, has organised an annual speechcraft program to help students to improve their leadership and communication skills. This program is organised by the Moratuwa University Textile Association in collaboration with the Colombo West Rotaract club, and conducted by the Millennium Toastmasters club. Currently it is restricted to 25 students at a time. Each student is taken under the wing of a toastmaster, who will help him/ her to develop both leadership and public speaking skills.

In addition to this, the alumni of the Department function as mentors to the students, and are available to help them during their industrial placement and also a special mentoring programme was recently introduced in focusing small groups of students being continuously mentored by an appointed mentor throughout their staying in the University.

Students are also given access to follow special English and communication skills development courses conducted by the English Language Teaching Centre of the University.

Student Records

Student performance records are maintained by the overall degree course coordinator or course director, and by the respective level/ year coordinators.

Awards & Scholarships

The Hirdaramani Memorial Trust Gold Medal is awarded annually to the BSc Engineering student of the Department obtaining the best overall GPA of 3.8 or more. If no student meets this criteria the best student having at least a GPA of 3.7 receives the Hirdaramani Memorial Trust award at the convocation.

The MAS Holdings Gold Medal is awarded annually to the B.Design student of the Department obtaining the best average of 85% or more at the convocation.

The MAS Holdings Award for the Best Overall Student is awarded to one student each on the BSc Engineering and the BDes (FDPD) programmes. The recipients are selected from the final year students according to a senate approval criteria.

The A&E Award for the Best Industrial Trainee is offered to the BSc Engineering programme. Students who receive a stipulated minimum Cumulative Grade Point Average and a stipulated minimum mark at the Industrial Training module may apply, and a shortlist is expected to submit a brief report and make a presentation to a panel.

The Serendib Inspirational award, Commercially Creative Designer award, Menswear Designer award, Creative Knitwear Designer award, Innovative Designer award, Innovative Textile Fabric Designer award as well as the Outstanding Designer Brand award are given to Year 4 B.Design students at the Graduation Fashion Show. All the awards are decided by a panel of judges based on the catwalk presentation.

The '00 batch bursaries are donated by graduates of the 2000 intake of the BSc Engineering degree programme to be given to 3 students of Level 1 or 2 based on their financial need. Other bursaries may be offered time to time through MUTA.

BSc Engineering Honours Curriculum, Textile & Apparel Engineering

The Textile & Apparel Engineering curriculum is developed to award four focus areas are mentioned below.

01. Textile Engineering
02. Apparel Engineering
03. Colouration & Finishing of Textile
04. Technical textile

The students will have the choice in selecting modules to meet the criterion to obtain the above focus areas as graduate without any focus areas.

C –Compulsory O –Optional E –Elective

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | | Credits offered | | Norm | | Evaluation % | |
|-----------------------------------|---------------------------------------|----------------|------------------------------|------------|-------------|-----------------|-----|-------------|------------|--------------|----------|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE | |
| Semester 1 | | | | | | | | | | | |
| Specialization requirement | | | | | | | | | | | |
| MA1014 | Mathematics | C | 5/2 | 1 | 3.0 | | | 18.0 | | 20 | 80 |
| CS1033 | Programming Fundamentals | C | 2 | 2 | 3.0 | | | | | 20 | 80 |
| ME1033 | Mechanics | C | 2 | 2/4 | 2.0 | | | | | 20 | 80 |
| MT1023 | Properties of Materials | C | 2 | 2/4 | 2.0 | | | 18.0 | | 20 | 80 |
| EEL040 | Electrical Fundamentals | C | 2 | 2/4 | 2.0 | | | | | 20 | 80 |
| TE1010 | Fibre Science | C | 5/2 | 2/2 | 3.0 | | | | | 30 | 70 |
| CE1023 | Fluid mechanics | C | 2 | 2/4 | 2.0 | | | | | 20 | 80 |
| EL1030 | Language Skills Enhancement (S1 & S2) | C | - | 2 | 1.0 | | | | | 100 | 0 |
| Total | | | | | 18.0 | 0.0 | | 18.0 | 0.0 | | 0 |

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | | Credits offered | | Norm | | Evaluation % | |
|-----------------------------------|---|----------------|------------------------------|------------|-------------|-----------------|-----|-------------|------------|--------------|----------|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE | |
| Semester 2 | | | | | | | | | | | |
| Specialization requirement | | | | | | | | | | | |
| MA1024 | Methods of Mathematics | C | 5/2 | 1 | 3.0 | | | 23.0 | | 30 | 70 |
| EN1803 | Basic Electronics for Engineering Applications | C | 2.0 | 2 | 3.0 | | | | | 40 | 60 |
| MT1814 | Engineering Materials | C | 3/2 | 1 | 2.0 | | | | | 40 | 60 |
| TE1020 | Introduction to Textile and Apparel Industry | C | 2.0 | 2 | 3.0 | | | | | 50 | 50 |
| CS2813 | Visual Programming | C | 1.0 | 2 | 2.0 | | | 21.0 | | 60 | 40 |
| TE1030 | Textile Chemistry | C | 3.0 | - | 3.0 | | | | | 30 | 70 |
| TE1040 | Pattern Technology and Construction I | C | 1.0 | 2 | 2.0 | | | | | 70 | 30 |
| TE1050 | Principles of Textile Machinery & Instrumentation | C | 3/2 | 2/2 | 2.0 | | | | | 30 | 70 |
| EEL030 | Language Skills Enhancement (S1 & S2) | C | - | 2 | 1.0 | | | | | 100 | 0 |
| HM-1 | Humanities Elective I | E | 2.0 | - | 2.0 | | | 2.0 | | | |
| Total | | | | | 23.0 | 0.0 | | 23.0 | 0.0 | | 0 |

| Module Code | Module Name | C/E/O Category | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | |
|-------------------|---|----------------|------------------------------|------------|-----------------|----------|------|------|--------------|----------|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE |
| Semester 3 | | | | | | | | | | |
| MA2014 | Differential Equations | C | 2.0 | - | 2.0 | | 20 | 23.0 | 30 | 70 |
| MA2024 | Calculus | C | 2.0 | - | 2.0 | | | | 30 | 70 |
| ME1823 | Fundamentals of Engineering Thermodynamics and Applications | C | 5/2 | 2/2 | 3.0 | | | | 30 | 70 |
| TE2010 | Principles of Yarn Manufacture | C | 5/2 | 2/2 | 3.0 | | | | 30 | 70 |
| TE2020 | Work Study | C | 5/2 | 2/2 | 3.0 | | | | 40 | 60 |
| TE2030 | Knitting Technology | C | 5/2 | 2/2 | 3.0 | | | | 30 | 70 |
| TE2040 | Weaving Technology I | C | 5/2 | 2/2 | 3.0 | | | | 40 | 60 |
| TE2050 | Communication Skills Enhancement (S3 & S4) | C | - | 2 | 1.0 | | | | 100 | 0 |
| TE2900 | Engineering Skills Development | C | 1/2 | 5 | 3 | | | | 100 | 0 |
| Total | | | | | 20.0 | 3 | | | 20 | 3 |

| Module Code | Module Name | C/E/O Category | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | |
|-------------------|--|----------------|------------------------------|------------|-----------------|------------|------|------|--------------|------------|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE |
| Semester 4 | | | | | | | | | | |
| MA2034 | Linear Algebra | C | 2.0 | - | 2.0 | | 16.0 | 19.0 | 30 | 70 |
| MA3014 | Applied Statistics | C | 2.0 | - | 2.0 | | | | 30 | 70 |
| TE2110 | Weaving Technology I1 and Structures | C | 3.0 | 2 | 4.0 | | | | 40 | 60 |
| TE2120 | Apparel Production Engineering | C | 2.0 | 2 | 3.0 | | | | 40 | 60 |
| TE2130 | Pneumatics | C | 5/2 | 2/2 | 3.0 | | | | 30 | 70 |
| TE2050 | Communication Skills Enhancement (S3 & S4) | C | - | 4 | 2.0 | | | | 100 | 0 |
| TE2910 | Computer Applications in Textile Engineering | C | 1.0 | 4 | 3.0 | | | | 100 | 0 |
| TE2210 | Pattern Technology and Construction II | E | 1.0 | 2 | 2.0 | | | | 70 | 30 |
| TE2220 | Nanotechnology | E | 5/2 | 2/2 | 3.0 | | | | 30 | 70 |
| Total | | | | | 21.0 | 3.0 | | | 16.0 | 3.0 |

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | |
|-----------------------------------|--|----------------|------------------------------|------------|-----------------|------------|-------------|------------|--------------|----|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE |
| Semester 5 | | | | | | | | | | |
| Specialization requirement | | | | | | | | | | |
| MN3043 | Business Economics & Financial Accounting | C | 3.0 | - | 3.0 | | 17.0 | | 30 | 70 |
| TE3010 | Textile Testing, Evaluation and Quality Assurance | C | 7/2 | 2/2 | 4.0 | | | | 50 | 50 |
| TE3020 | Non Wovens and Technical Textiles | C | 3.0 | - | 3.0 | | 17.0 | | 40 | 60 |
| TE3030 | Circular knitting | C | 5/2 | 2/2 | 3.0 | | | | 30 | 70 |
| TE3040 | Colouration & Finishing of Textiles | C | 5/2 | 2/2 | 3.0 | | | | 40 | 60 |
| TE3880 | Engineer and Society (S5 & S6) | C | 0.0 | 2 | 1.0 | | | | 100 | 0 |
| TE3210 | CAD in Apparels | E | 2.0 | 2 | 3.0 | | | | 100 | 0 |
| TE3220 | Analytics for Manufacturing and Service Businesses | E | 5/2 | 2/2 | 3.0 | | | | 70 | 30 |
| TE3230 | Instrumentation & Programming for Automation | E | 5/2 | 2/2 | 3.0 | | | | 40 | 60 |
| Total | | | | | 26.0 | 0.0 | 17.0 | 0.0 | | |

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | |
|-----------------------------------|---------------------|----------------|------------------------------|------------|-----------------|------------|----------|------------|--------------|----|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE |
| Industrial Training | | | | | | | | | | |
| Specialization requirement | | | | | | | | | | |
| TE3990 | Industrial Training | C | - | - | 6.0 | | 6.0 | | | |
| Total | | | | | 0.0 | 6.0 | 0 | 6.0 | | |

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | |
|-----------------------------------|--|----------------|------------------------------|------------|-----------------|------------|-------------|------------|--------------|----|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE |
| Semester 6 | | | | | | | | | | |
| Specialization requirement | | | | | | | | | | |
| TE4200 | Design/Research Project (S6, S7 & S8) | C | 1/2 | 2/2 | 1.0 | | 10.0 | | 100 | 0 |
| TE3050 | Quality Management | C | 3.0 | - | 3.0 | | 6.0 | | 40 | 60 |
| TE3880 | Engineer and Society (S5 & S6) | C | 1.0 | 2 | 2.0 | | | | 100 | 0 |
| TE3200 | Comprehensive Design Project (Textile) | E | 0.0 | 4 | 2.0 | | 2.0 | | 100 | 0 |
| TE3210 | Comprehensive Design Project (Apparel) | E | 0.0 | 4 | 2.0 | | | | 100 | 0 |
| HM-2 | Humanities Elective II | E | 2.0 | - | 2.0 | | 2.0 | | | |
| TE3240 | Equipment Technology in Apparels | E | 3/2 | 2/2 | 2.0 | | | | 30 | 70 |
| Total | | | | | 14.0 | 0.0 | 10.0 | 0.0 | | |

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | | |
|-------------------|---|----------------|------------------------------|------------|-----------------|------------|------------|------------|--------------|-----|----|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE | |
| | | | Specialization requirement | | | | | | | | |
| Semester 7 | | | | | | | | | | | |
| TE4200 | Design/Research Project (S6, S7 & S8) | C | 1 | 4 | 3.0 | | | 9.0 | | 100 | 0 |
| TE4010 | Control Systems & Applications | C | 5/2 | 2/2 | 3.0 | | | | | 40 | 60 |
| TE4020 | Environmental Management and Sustainability | C | 5/2 | 2/2 | 3.0 | | | | | 30 | 70 |
| TE4210 | Structural Mechanics of Yam & Fabrics | E | 2 | 2 | 3.0 | | | | | 40 | 60 |
| TE4220 | Advanced Yam Manufacture | E | 5/2 | 2/2 | 3.0 | | | | | 30 | 70 |
| TE4230 | Textile Composites | E | 5/2 | 2/2 | 3.0 | | | | | 30 | 70 |
| TE4240 | Advanced Colouration | E | 5/2 | 2/2 | 3.0 | | | | | 40 | 60 |
| TE4350 | Functional Finishing for Textiles | E | 5/2 | 2/2 | 3.0 | | | | | 40 | 60 |
| TE4250 | Warp Knitting & Structures | E | 3/2 | 2/2 | 2.0 | | | | | 30 | 70 |
| TE4260 | Modern Technologies in Apparel Construction | E | 1 | 2 | 2.0 | | | | | 30 | 70 |
| TE4270 | Advanced Weaving Technology & Structures | E | 2 | 4 | 4.0 | | | | | 40 | 60 |
| TE4280 | Work Place Engineering | E | 3 | - | 3.0 | | | | | 30 | 70 |
| TE4290 | Production Planning & Control | E | 2 | 2 | 3.0 | | | | | 40 | 60 |
| MN4063 | Organizational Behavior and Management | E | 2.0 | - | 2.0 | | | | | 30 | 70 |
| MN4133 | Consumer and Industrial Marketing | E | 2.0 | - | 2.0 | | | | | 30 | 70 |
| Total | | | | | 42.0 | 0.0 | 9.0 | 0.0 | | | |

| Module Code | Module Name | Category C/E/O | Time allocation [Hours/Week] | | Credits offered | | Norm | | Evaluation % | | |
|-------------------|--|----------------|------------------------------|------------|-----------------|----------|-------------|------------|--------------|-----|----|
| | | | Lecture | Lab / Tute | GPA | NGPA | GPA | NGPA | CA | WE | |
| | | | Specialization requirement | | | | | | | | |
| Semester 8 | | | | | | | | | | | |
| TE4200 | Design/Research Project (S6, S7 & S8) | C | - | 8 | 4.0 | | | 12.0 | | 100 | 0 |
| TE4110 | Marketing & Merchandising for Textiles & Apparels | C | 2 | 2 | 3.0 | | | 12.0 | | 60 | 40 |
| TE4120 | Lean Manufacturing | C | 5/2 | 2/2 | 3.0 | | | | | 40 | 60 |
| MN4123 | Human Resource Management and Industrial Relations | C | 2 | - | 2.0 | | | | | 30 | 70 |
| TE4310 | Flat Knitting Techniques & Integrated Designing | E | 1 | 4 | 3.0 | | | | | 100 | 0 |
| TE4320 | Plant Maintenance Engineering | E | 3/2 | 2/2 | 2.0 | | | | | 40 | 60 |
| TE4340 | Advanced Pattern Technology & Virtual Prototyping | E | 1 | 4 | 3.0 | | | | | 70 | 30 |
| TE4330 | Smart and Functional Textiles | E | 5/2 | 2/2 | 3.0 | | | | | 40 | 60 |
| TE4360 | Computer-aided Woven Fabric Design | E | 1 | 4 | 3.0 | | | | | 100 | 0 |
| TE4370 | Colour Measurement & Colour Matching | E | 2 | 2 | 3.0 | | | | | 40 | 60 |
| MN4151 | Project Management | E | 2 | - | 2.0 | | | | | 30 | 70 |
| MN4043 | Technology Management | E | 2 | | 2.0 | | | | | 30 | 70 |
| MN4113 | Production and Operations Management | E | 2 | | 2.0 | | | | | 30 | 70 |
| Total | | | | | 35 | 0 | 12.0 | 0.0 | | | |

| | | | | |
|--------------------|--------------|-------------|--------------|-------------|
| Grand Total | 199.0 | 12.0 | 125.0 | 12.0 |
|--------------------|--------------|-------------|--------------|-------------|

| | | |
|--|--|--------------|
| Total credit requirement for the Specialization | | 137.0 |
| Faculty/Specialization Electives beyond the specialization requirements [refer faculty electives table]* | | 13.0 |
| TOTAL CREDIT REQUIREMENT FOR GRADUATION | | 150.0 |

Curriculum of the BDes in Fashion Design & Product Development Honours Degree Program

Units with Assessment MAP YEAR 1

Year 1 - Term 1

| code | Unit | Lps | Assessment Value |
|--------|--------------------|-----------|------------------|
| FD1010 | Foundation Studies | 20 | 50% |
| FD1020 | Visual Studies | 20 | 50% |
| FD1090 | Learning Portfolio | ** 1 | Pass |
| | | 41 | |

Year 1- Term 2

| code | Unit | Lps | Assessment Value |
|---------|--|-----------|------------------|
| FD 1210 | Design and Technical Studies in Fashion | 20 | 50% |
| FD 1220 | Design and Technical Studies in Textiles | 20 | 50% |
| FD 1270 | Introduction to Textiles for Design | ***3 | Pass |
| FD 1080 | Historical and Contextual studies 1 | **2 | Pass |
| FD 1090 | Learning Portfolio | **2 | Pass |
| | | 47 | |

Year 1- Term 3

| code | Unit | Lps | Assessment Value |
|---------|-------------------------------------|-----------|------------------|
| FD 1310 | Design Realisation 1 in Fashion | 30 | 55% |
| | OR | OR | |
| FD 1320 | Design Realisation 1 in Textiles | 30 | 55% |
| FD 1370 | Textiles for Design 1 | 7 | 20% |
| FD 1350 | The Business of Fashion / Textiles | 10 | 15% |
| FD 1080 | Historical and Contextual Studies 1 | 3 | 05% |
| FD 1090 | Learning Portfolio | 2 | 05% |
| | | 52 | |

** - Formative Mandatory

*** - Mandatory

Total Learning points 140

Units with Assessment MAP Year 2

Year 2 -Term 1

| code | Unit | Lps | Assessment Value |
|---------|--|-----------------|------------------|
| FD 2110 | Design Realisation 2 in Fashion OR | 30 OR | 70% |
| FD 2120 | Design Realisation 2 in Textiles | 30 | 70% |
| FD 2150 | Business and Marketing | 10 | 30% |
| FD 2080 | Historical and Contextual studies 2 | ** 5 | Pass |
| FD 2090 | Learning Portfolio | ** 1 | Pass |
| | | 46 | |

Year 2- Term 2

| code | Unit | Lps | Assessment Value |
|---------|--|-----------------|------------------|
| FD 2210 | Design Realisation 3 in Fashion OR | 25 OR | 70% |
| FD 2220 | Design Realisation 3 in Textiles | 25 | 70% |
| FD 2350 | Introduction to Production planning and the supply chain | 10 | 10% |
| FD 2270 | Textiles for Design 2 | 5 | 10% |
| FD 2080 | Historical and Contextual studies 2 | 5 | 10% |
| FD 2090 | Learning Portfolio | ** 2 | Pass |
| | | 47 | |

Year 2 -Term 3

| code | Unit | Lps | Assessment Value |
|---------|--|-----------------|------------------|
| FD 2310 | Industry linked Team project in Fashion OR | 30 OR | 75% |
| FD 2320 | Industry linked Team project in Textiles | 30 | 75% |
| FD 2370 | Textiles for Design 3 | 5 | 10% |
| FD 2250 | Introduction to Product strategy | 10 | 10% |
| FD 2090 | Learning Portfolio | 2 | 05% |
| | | 47 | |

** - Formative Mandatory

Total Learning points 140

Units with Assessment MAP Year 3

| code | Unit | Lps | Assessment Value |
|---------|---|-----------|------------------|
| FD 3200 | Industrial placement | *** 5 | Pass |
| FD 3300 | Fashion Industry Investigative Study report | 30 | 100% |
| FD 3090 | Learning Portfolio | *** 5 | Pass |
| | | 40 | |

*** - Mandatory

Total Learning points 40

Units with Assessments MAP Year 4

Year 4 - Term 1 (Final Major Project Stage 1)

| Code | Unit | Lps | Assessment Value |
|---------|--|-----------|------------------|
| FD 4110 | Concept Development and Project Proposal of final major project in Fashion OR | 30 | 70% |
| FD 4120 | Concept Development and Project Proposal of final major project in Textiles | 30 | 70% |
| FD 4150 | Product Strategy and Production Planning | 10 | 30% |
| FD 4090 | Learning Portfolio | ** 5 | Pass |
| | | 45 | |

Year 4- Term 2 (Final Major Project Stage 2)

| Code | Unit | Lps | Assessment Value |
|---------|--|-----------|------------------|
| FD 4210 | Design Development and Problem Solving of final major project in Fashion OR | 30 | 80% |
| FD 4220 | Design Development and Problem Solving of final major project in Textiles | 30 | 80% |
| FD 4270 | Materials Analysis and Evaluation | 10 | 20% |
| FD 4090 | Learning Portfolio | ** 5 | Pass |
| | | 45 | |

Year 4- Term 3 (Final Major Project Stage 3)

| Code | Unit | Lps | Assessment Value |
|---------|--|-----------|------------------|
| FD 4310 | Realisation and Evaluation of final major project in Fashion OR | 40 | 80% |
| FD 4320 | Realisation and Evaluation of final major project in Textiles | 40 | 80% |
| FD 4090 | Learning Portfolio | 10 | 20% |
| | | 50 | |

** - Formative Mandatory

Total Learning points 140

Fire Assembly Point : "Lagaan" Opposite open place - Textile main building

**Composed and design by;
Mr. MGCC Dharmakeerthi
Mr. RMHW Muwanwella**





DEPARTMENT OF TEXTILE AND APPAREL ENGINEERING
UNIVERSITY OF MORATUWA
STUDENT HANDBOOK 2020