



**INSTITUTE OF TECHNOLOGY
UNIVERSITY OF MORATUWA, SRI LANKA**

**ANNUAL REPORT
&
ANNUAL ACCOUNTS**

2011

CONTENTS

	Page	
1	Vision Statement	1
2	Mission Statement and Goals	1
3	Director's Review	2
4	Organization Chart	4
5	Officers of the Institute	5
6	Boards of the Institute	6
7	Brief History of the NDT Course and the Establishment of ITUM	8
8	Brief Introduction to the NDT Programme	9
9	Summary of Examination Results	12
10	Details and Activities of Academic Divisions	
10.1	Civil Engineering Technology	17
10.2	Electrical and Electronic Engineering Technology	23
10.3	Mechanical Engineering Technology and Maritime Studies	31
10.4	Polymer, Chemical, and Textile Engineering Technology	40
10.5	Interdisciplinary Studies	49
10.6	Summary Details of Academic Staff	53
11	Details of Non Academic Staff	53
12	Learning Resources and Student Support	53
13	Link with the Industry	
13.1	Industrial Training	56
13.2	Employment	58
13.3	Guest lectures	58
13.4	Industrial Visits	58
13.5	Link with Academic & Professional Institution	58

14.	Details of Recurrent Expenditure	60
15.	Details of Capital Expenditure	60
16.	Details of Projects (Local/Foreign Funded)	60
17.	Details of Project Expenditure(Local/Foreign Funded)	60
18.	Details of Financial Progress (Expenditure)	60
19.	Details of Financial Progress (Generated Income)	61
20.	Financial Performance Analysis – 2011	61
21.	Details of Infrastructure Facilities Received in 2011	61
22.	Audit Committee Report	62
23.	Auditor General’s Report	63
24.	Reply to the Auditor General’s Report	72

1. Vision Statement

To be a center of excellence of Technological Education.

2. Mission Statement and Goals

Mission

Be a dynamic technological institute in the region and actively contribute to the educational, economic, and social advancement of Sri Lankan community by:

- Providing accessible, flexible, and efficient technological education and skills training to meet the needs of the society and industry.
- Providing an environment for innovation and creativity.
- Formulation an active collaboration with industry, business and the community for career opportunities.
- Enhancing social and economic pathways and opportunities for young people.

Goals

Goal 1 : Establish a physical environment compatible with a modern post- secondary Technological Institute.

Goal 2 : Create a teaching and skills training system that is flexible and accessible to a larger student population in order to cater to the needs of the society and industry.

Goal 3 : Establish an environment that promotes research of practical relevance and encourage innovation and creativity.

Goal 4 : Establish a strong and a mutually beneficial partnership and involvement with industry.

Goal 5 : Develop a team of qualified and motivated staff.

Goal 6 : Create an environment that promotes the total development of students.

Goal 7 : Develop a management system that ensures quality and efficiency at all levels of the institution.

3. Director's Review

a. Brief Introduction

Institute of Technology, University of Moratuwa is a premier higher educational institute primarily responsible for conducting the nationally and internationally well recognized National Diploma in Technology (NDT) study programme.

Institute entered its 11th year of existence in 2011. Although the institute continued to face numerous difficulties in conducting its activities, stemming from the fact that the institute do not possess its own physical facilities and is forced to depend on the sharing of the facilities of the University of Moratuwa, it diligently continued to perform its expected national service in the year under review.

b. Achievements

Academic activities of the institute were conducted according to academic schedules despite few interruptions due to unforeseen circumstances. 350 students were admitted to the institute to nine disciplines, namely, Chemical, Textile, Polymer, Civil, Electrical, Electronics, Marine, Mechanical, and Nautical. Orientation programme was successfully conducted for the new students. Award Ceremony was held on schedule to award the Diplomas for successful students. Survey camp for the 2nd year Civil Engineering students and the industrial training programme for all the third year students were conducted as planned.

A notable achievement of the year under review is the progress made in the most focused activity the long standing proposed project for the Relocation and Development of the institute. Standing Cabinet Appointed Review Committee (SCARC) headed by the secretary to the prime minister recognized this project as an important priority project and recommended to refer the proposal to the Standing Cabinet Appointed Procurement Committee (SCAPC) of the Ministry of Higher Education to proceed. On the recommendation of the SCAPC, Cabinet of Ministers granted approval in November 2011 for the Ministry of Higher to enter into a Contract with the China National Aero Technology Import and Export Corporation to carry out the project.

c. Failure & Justification

The ITUM, since its establishment in 2000, have faced many constraints which prevented its development both quantitatively as well as qualitatively. The student intake which was 350 students per year for few decades, remains same even in the year 2011, due to the limitations imposed in sharing facilities with the main university. For the very same reason it was found difficult, by both staff and students alike, to do the full implementation of the academic upgrading identified with the revision of syllabus. Relocation and Development of the Institute as envisaged is the most desirable and implementable solution for this long standing handicap. Although that there is an unexpected delay in the commencement of physical activities of the project for relocation the institute is in the correct path in achieving this goal.

d. Future Plan

The future plans of the institute are generally tagged to the proposed major development project of "Relocation and Development of the ITUM". While all the stake holders of this major activity are being mobilized to achieve the goal, ITUM will continue to carry out its national duty of conducting the NDT program with the current number of students, but with enhanced quality, utilizing whatever the opportunities available under the existing set up.

4. Organization Chart - 2011

Figure 1 depicts the hierarchical arrangements of the Institute of Technology, University of Moratuwa.

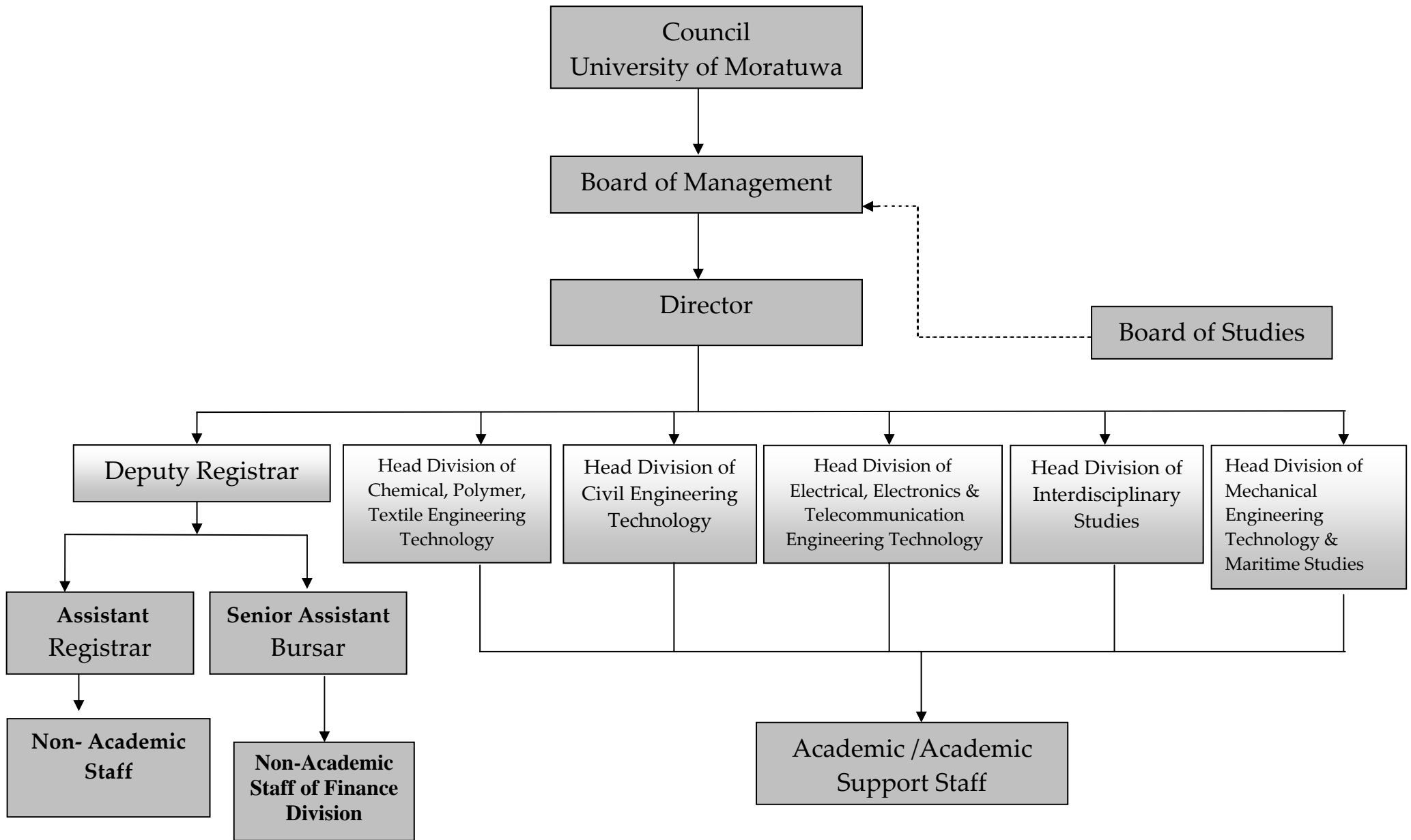


Figure 1: Hierarchical arrangements of the Institute of Technology, University of Moratuwa.

5. Officers of the Institute

Director	Dr. T.A.G Gunasekara Ph.D. – National University of Ireland M.Sc. (First Class Honors) - National University of Ireland M.Eng. – University of Moratuwa NDT (Civil Eng.) MIESL
Deputy Registrar	Mrs. D.J. Wickrama BA (First Class Honours)- University of Kelaniya Postgraduate Diploma in Management- Open University Diploma in English- University of Colombo
Senior Assistant Bursar	Ms. S. A.S. De Silva B.Com (Special)- University of Colombo PGDBM- University of Colombo ICASLPI MAAT
Assistant Registrar	Mrs. S.R.S. Udeshi B.Sc. Agriculture (2 nd Upper Division)- University of Ruhuna. MPhil- Integrated Water Resource Management- University of Peradeniya . Diploma in English for professionals (SLIDA). MBA University of Sri Jayawardanapura (reading).
Postal Address	Institute of Technology University of Moratuwa Katubedda, Moratuwa, Sri Lanka.
Telephone Numbers:	General : 011 2650301/340 /441/534/671 Fax : 011 2650565 Director : 011 2650064 Deputy Registrar : 011 2650427 Senior Assistant Bursar: 011 2650565

6. Boards of the Institute

Members of the Board of Management, Institute of Technology, University of Moratuwa as at December 2011

1.	Dr.	T.A.G.	Gunasekara	Director/Institute of Technology, University of Moratuwa.
2.	Dr.	A.M.N.	Alagiyawanna	} Nominees of the University Grants Commission
3.	Mr.	J.K.	Lankathilake	
4.	Mr.	A.J.	Karunaratne	
5.	Mr.	P.G	Jayasinghe	Nominee of the Secretary to the Ministry of the Minister in-charge of the subject of Higher Education.
6.	Mr.	A.W.	Seneviratne	Nominee of the Secretary to the Ministry of the Minister in-charge of the subject of Shipping
7.	Prof.	U.G.A	Puswewala	Dean of the Faculty of Engineering of the University.
8.	Prof.	P.K.S	Mahanama	Dean of the Faculty of Architecture of the University.
9.	Mr.	L.J.K.	Hettiarachchi	Nominee of the Council of University of Moratuwa.
10.	Prof.	J.R.	Lucas	Nominee of the Senate of University of Moratuwa.
11.	Mrs.	M.M.P.D	Samarasekara	} Nominees of the Board of Studies of the Institute of Technology, University of Moratuwa.
12.	Dr. (Mrs.)	W.B.M.	Thoradeniya	

Members of the Board of Studies, Institute of Technology, University of Moratuwa as at December 2011.

1. Dr. T.A.G. Gunasekara, Director/ITUM
2. Mr. M.I.R.T Fernando
3. Mrs. S.M Kannangara
4. Mrs. P.N.P. Fonseka
5. Mrs. S Nagodavithana
6. Mrs. C.P.N Attygala
7. Miss. Kamala Gamage
8. Mrs. P.S. Yatapana
9. Mrs. K.M.W Abeykoon
10. Mrs. M.D.S. Seneviratne
11. Mrs. S.T.M.M Jayawardena
12. Mr. K.M. Ranasiri
13. Mrs. N.V Kularathne
14. Ms. W.P.S.K. Perera
15. Mr. J.M.P. Gunasekara
16. Mrs. D.Y.T. Bambarawanage
17. Dr. M.A.B Prashantha
18. Mrs. G.K. Jayathunga
19. Mrs. M.A. Bibile
20. Mr. T.R.D Perera
21. Mrs. R.C.Kodikara Librarian /UOM
22. Dr. (Mrs.) W.B.M. Thoradeniya
23. Mrs. M.M.P.D. Samarasekara
24. Ms. S.L. Jayasuriya
25. Dr. (Mrs.) I.N Jayatilaka
26. Mrs. M.V Dassanayake
27. Mr. G.A.M.D. Wickramathilake
28. Ms. B Balasubramanium
29. Ms. K. Galappaththi
30. Mr. K Balachandran
31. Mrs. B.A.S. Priyanka
32. Mr. A.H.L.K Amarasekara
33. Mr. A.M. Muzathik
34. Mr. G.G. Jayarathna
35. Mr. D.G.U.Solangaarachchi
36. Mrs. W.A Indira
37. Mrs. S.C Mathugama
38. Mrs. K.M.D. Silva
39. Mrs. M.C.W. Somarathna
40. Mrs. N.P.K Semananda
41. Mrs. J.B. Samarasinghe
42. Mr. G.D. Nanayakkara
43. Mr. D.A Thevathasan - Industry Representative
44. Mr. S. A. Rajapaksha - Student Representative
45. Mr. S.T.U.P. Gunathilaka – Student Representative

7. Brief History of National Diploma in Technology Course and the Establishment of Institute of Technology, University of Moratuwa.

The roots of the National Diploma in Technology (NDT) Course date back to 1940s to the Ceylon Technical College, Maradana, where a two year Junior Technical Officer' (JTO) Courses was conducted in addition to the four year Diploma in Technology, preparing the students for the B.Sc Engineering degree of the University of London. JTO was a well recognized middle level technical course and those who completed the course immensely contributed to the development of the engineering sector of the country.

With the establishment of the Institute of Practical Technology (IPT) at Katubedda, Moratuwa, in 1960, the JTO course was transferred from Maradana to Moratuwa. The IPT was established with aid from the Government of Canada to develop and implement a practically oriented middle level engineering technology courses.

The IPT was elevated to Ceylon College to Technology (CCT) in 1966 and a rapid development took place with course diversification. The CCT commenced a five year Diploma in technology course and the JTO course was also revised introducing one year in-plant training to the course and making it a three year course leading to the National Diploma in Technology (NDT). Later, CCT was elevated to a Campus of the single University of Sri Lanka in 1972 and subsequently, it has grown to be the University of Moratuwa. The NDT course was then conducted by the university on behalf of the Ministry of Higher Education.

In 1987, the NDT course became an internal course of the University of Moratuwa under Section 29(e) of the University Act No. 16 of 1978 and the educational qualification to gain entry to the course became GCE Advanced Level. The Institute of Technology, University of Moratuwa (ITUM), an institute under the University of Moratuwa primarily for the conduct of National Diploma in Technology and similar level courses was established in 2000, under Ordinance No. 3 of 2000. The ITUM functions under a Board of Management and is expected to physically establish the Institute separately for the independent development of the courses.

Those who completed JTO/NDT are contributing immensely for the development of the nation. The sound education and training given by the NDT course provide the students with the necessary competencies to perform middle level functions in the Engineering/Technology fields and forms a good basis for further education. The recognition earned by the NDT course has made it the 'yard stick' to judge the level of other middle level technological course in the country.

8. Brief Introduction to the NDT Programme.

The primary aim of the course is to produce engineering diplomates required by the industry of our country in various disciplines. The institute conducts the NDT programme in nine disciplines with a total intake of 350. The breakdown is as follows:

Chemical Engineering Technology	-	25
Civil Engineering Technology	-	80
Electrical Engineering Technology	-	40
Electronic and Telecommunication Engineering Technology	-	40
Marine Engineering Technology	-	15
Mechanical Engineering Technology	-	60
Nautical Studies	-	15
Polymer Technology	-	25
Textile and Clothing Technology	-	50

In addition, up to a maximum of five student enrolments are allocated to armed forces and University Non Academic Staff.

The admission to the NDT programme is done through a unique process. Applications are invited by a public advertisement in the government gazette, selected newspapers and the website. The students from three past consecutive G.C.E Advanced levels are eligible to apply. Students are selected on the basis of Z-Scores, district / merit quota (as in the case of university admission), and their preference to different disciplines.

A fully fledged diplomate is initially expected to function as the link between the professional Engineer or Manager and the workforce at the field/shop level. This role requires a diplomate to develop professionally and improve his communication and managerial skills. He /She needs to educate himself/herself in the chosen study field of study so that he/she would be able to appreciate the innovations/designs by the professional engineer and would be able to communicate with the subordinates and make an innovation/design a reality.

Thus the course consists of a two- year academic study period and one year industrial training. The first year subjects are designed mainly to equalize, consolidate and improve the student's knowledge in basic sciences and to introduce the specialized discipline of study to which he/she has been selected. It will also give exposure to some basic skills required in engineering practice (e.g. work shop Technology Engineering Drawing). Each discipline offers one or more field subject/s of the student's chosen field of study. (e.g.) Civil Engineering Department offers Building Construction for the Civil Engineering stream)

English Language is a compulsory subject in the first year due to the following reasons:

- i. Communication plays an important role in a diplomate's career. Therefore students are required to develop their skills in comprehension, speech and report- writing.
- ii. The NDT course is conducted entirely in the English medium. Since most of the students have done their studies in Sinhala or Tamil medium up to the GCE (A/L), their levels of proficiency in the English language vary widely and there is always room for improvement.

The second year subjects mainly include the application of various engineering phenomena in the selected field of study.

The third year is allocated for obtaining the required hands-on experience in the industry. Training at the accepted industrial establishments is organized and monitored by the National Apprenticeship and Industrial Training Authority (NAITA) and the Lecturer in charge of Industrial Training at the ITUM.

At the end of the three years of education and training, the successful students are awarded the National Diploma in Technology with an **Ordinary, Credit** or **Distinction** pass, as per the performance criteria approved by the University.

The tracer studies has revealed that the employability of passing out NDT diplomats is 100% within one year after passing out.

The new academic curriculum now in operation at the ITUM was introduced in the year 2005 for the first year students and in 2006 for the second year students. The purpose was to broaden the knowledge of students in their selected fields of study, while keeping abreast of current technological advances in the industrial world.

Student Admission

Number of Students in academic year as at 31.12. 2011

	1 st Year (2010/2011)	2 nd Year (2009/2010)	3 rd Year (2008/2009)
1. Chemical Engineering Technology	25	23	21
2. Civil Engineering Technology	83	82	80
3. Electrical Engineering Technology	40	37	36
4. Electronic & Telecommunication Engineering Technology	44	40	42
5. Marine Engineering Technology	15	19	19
6. Mechanical Engineering Technology	61	55	51
7. Nautical Studies & Technology	15	17	17
8. Polymer Technology	21	17	17
9. Textile & Clothing Technology	51	44	44
Total	355	334	327

Number of students awarded the National Diploma in Technology for 2007/2008 Batch at the National Diploma in Technology Award Ceremony, Held at the BMICH, on 29.08.2011

1. Chemical Engineering Technology	17
2. Civil Engineering Technology	69
3. Electrical Engineering Technology	36
4. Electronic & Telecommunication Engineering Technology	36
5. Marine Engineering Technology	22
6. Mechanical Engineering Technology	52
7. Nautical Studies & Technology	14
8. Polymer Technology	15
9. Textile & Clothing Technology	35
Total	296

Institute of Technology, University of Moratuwa
NDT 1st Year Examination 2010/ 2011 held in February /March 2012
Summary of Results

Field	No. Applied	Fail	Fail -E	R1	R2	R3	RR1	RR2	RR3	Pass	E- Pass	Completed	Pass -E
Chemical- 1 st attempt	23	-	-	06	01	01	-	-	-	11	-	-	04
Repeat	01	-	-	01			-	-	-	-	-	-	-
Referred	07	-	-	-			03	-	01	-	-	03	-
Civil - 1 st attempt	79	03	03	-	03	07	-	-	-	54	05	-	04
Repeat	*20	08	01	02	02	01	-	-	-	05	-	-	-
Referred	28	-	-	-	-	-	03	03	02	-	02	18	-
*1withheld													
Electrical- 1 st attempt	40	01	03	05	01	02	-	-	24	-	-	-	04
Repeat	05	02	01	-	-	-	-	-	02	-	-	-	-
Referred	18	-	-	-	-	-	07	01	-	-	-	10	-
Electronics & Telecommunic ation- 1 st attempt	*40	-	02	04	01	01	-	-	-	26	-	-	04
Repeat	04	01	-	-	-	-	-	-	-	03	-	-	-
Referred	12	-	-	-	-	-	02	-	-	-	01	9	-
*2withheld													
Mechanical- 1 st attempt	*59	01	05	03	01	04	-	-	-	37	-	-	05
Repeat	12	02	03	02	-	-	-	-	-	04	-	-	-
Referred	31	-	02	-	-	-	05	01	-	-	01	22	-
*3withheld													
Marine - 1 st attempt	14	-	-	03	01	-	-	-	-	07	-	-	03
Repeat	01	-	-	-	-	-	-	-	-	01	-	-	-
Referred	05	-	-	-	-	-	-	-	-	-	-	05	-
Nautical- 1 st attempt	13	-	-	01			-	-	-	09	-	-	03
Repeat	03	-	-	01			-	-	-	02	-	-	-
Referred	05	-	-	-			03	01	-	-	-	01	-
Polymer- 1 st attempt	22	-	01	02		01	-	-	-	15	03	-	-
Repeat	04	-	-	-		01	-	-	-	03	-	-	-
Referred	01	-	-	-		-	-	-	-	-	-	01	-
Textile - 1 st attempt	45	02	03	05		02	-	-	-	29	-	-	03
Repeat	09	04	02	-		02	-	-	-	-	-	-	01
Referred	17	-	-	-		-	08	-	01	-	-	08	-
Total	399	24	26	35	10	22	31	6	30	206	12	77	31

Fail	-	Failure
Fail-E	-	Failure including English
R	-	Repeat
RR	-	Re-Referred
Pass	-	Pass the 1 st year Examination
E-Pass	-	English Pass
Completed	-	Completed the 1 st year Examination
Pass-E	-	Pass the 1 st Examination excluding English

Institute of Technology, University of Moratuwa
NDT 2nd Year Examination 2010 / 2011 held in January /February 2012
Summary of Results

Field	No. Applied	Fail	R1	R2	RR1	RR2	Pass	Completed	Fail%	Pass %
Chemical-										
1st attempt	22	01	02	01	-	-	18	-	4.45	81.81
Repeat	03	01	01	-	-	-	01	-	33.33	33.33
Referred	02	-	-	-	-	-	-	02	-	-
Civil -										
1st attempt	83	14	06	04	-	-	59	-	16.86	71.08
Repeat	30	16	03	03	-	-	08	-	53.33	26.66
Referred	12	-	-	-	03	-	-	09	-	-
Electrical-										
1st attempt	37	01	02	01	-	-	33	-	2.70	89.18
Repeat	04	02	-	-	-	-	02	-	50	50
Referred	12	-	-	-	01	-	-	11	-	-
Electronics & Telecommunication-										
1st attempt	40	03	05	01	-	-	31	-	7.5	77.5
Repeat	02	01	-	-	-	-	01	-	50	50
Referred	05	-	-	-	02	-	-	03	-	-
Mechanical-										
1st attempt	55	11	14	01	-	-	29	-	20	52.72
Repeat	10	03	01	-	-	-	06	-	30	60
Referred	05	-	-	-	01	-	-	04	-	-
Marine -										
1st attempt	19	02	02	02	-	-	13	-	10.52	68.42
Repeat	02	-	-	-	-	-	02	-	-	100
Referred	04	-	-	-	-	-	-	04	-	-
Nautical-										
1st attempt	04	-	-	-	-	-	04	-	-	100
Repeat	02	02	-	-	-	-	-	-	100	-
Referred	04	-	-	-	02	-	-	02	-	-
Polymer-										
1st attempt	17	-	01	-	-	-	16	-	-	94.11
Repeat	02	-	-	-	-	-	02	-	-	100
Referred	04	-	-	-	-	01	-	03	-	-
Textile -										
1st attempt	*43	07	05	-	-	-	29	-	16.27	67.44
Repeat	13	07	-	-	-	-	06	-	53.84	46.15
Referred	03	-	-	-	02	01	-	01	-	-
Total	439	71	42	13	11	01	260	39	-	-

Fail	-	Failure in Second year Examination
R1	-	Referred in One Subject
R2	-	Referred in Two subjects
RR1	-	Re-Referred One subject
RR2	-	Re-referred Two subjects
Pass	-	Pass the 2 nd year Examination.
Completed	-	Completed the 2 nd year Examination.

Summary Details of Resources and Students

Divisions	Course	Total Student	Total Academic Staff	Total Non Academic Staff
Civil Engineering Technology	Year I	81	Permanent 06	01
	Year II	83	Contract 02	
	Year III	74	Temporary 03 Visiting 07	
Mechanical Engineering Technology and Maritime Studies	Mechanical			01
	Year I	59	Permanent 08	
	Year II	53	Visiting } 08	
	Year III	51	Lecturers } 08	
	Marine		Visiting } 16	
	Year I	14	Instructors } 16	
	Year II	19	Assistant } 02	
	Year III	19	Project Officers } 02	
	Nautical		Contract 05	
Polymer, Textile & Chemical Engineering Technology	Polymer			Temporary 01
	Year I	22	Permanent 11	
	Year II	23	Visiting } 10	
	Year III	17	Lecturer } 10	
	Textile		Temporary } 04	
	Year I	53	Instructor } 04	
	Year II	47		
	Year III	44		
	Chemical			
Year I	24			
Year II	24			
Year III	23			
Electrical, Electronics & Telecommunication Engineering Technology	Electrical		Permanent 08	Temporary 01
	Electronics		Temporary } 39	
	Year I	82	/Visiting } 39	
	Year II	78	Instructors } 39	
Year III	74			
Interdisciplinary Studies	Year I	350	Permanent 07	Temporary 01
	Year II	350	Temporary 04	
	Year III	-	Visiting 02	

10 Details and Activities of Academic Divisions

10.1 Division of Civil Engineering Technology

1. Introduction

This division delivers National Diploma in Technology (NDT) in the field of Civil Engineering Technology and train students in different civil engineering technology fields such as building construction, water supply, irrigation and highway. The diploma holders who are geared to meet the needs of the industry play an important role that forms a link between Engineers and the rest of the work force in the industry by functioning as middle level technical managers in technical fields.

This division conducted the subjects indicated (with the indicated weekly loads) in Tables 1 and 2 for the NDT first year and second year programme in year 2011.

Table 1 - First Year

Code	Subject	L	T	P	Courses
DCE 101	Building construction and Draughtsmanship	2		3	Civil
DCE 102	Engineering mechanics and Strength of materials (only the St. of material part)	1	1/2	1	All
DME 101	Applied thermodynamics and Fluid mechanics (only the Fluid mechanics part)	1	1/2	1	All except Textile & Nautical

Table 2 - Second Year

Code	Subject	L	T	P	Courses
DCE 201	Building construction	2	-	3	Civil Eng. only
DCE 202	Industrial management in civil engineering technology	2	-	-	
DCE 203	Highway construction and maintenance	2	1	-	
DCE 204	Irrigation engineering	2	1	-	
DCE 205	Quantity surveying	2	1	-	
DCE 206	Strength of materials, Hydraulics and Soil mechanics	3	-	2	
DCE 207	Surveying and levelling	2	-	6	
DCE 208	Theory and design of structures	2	3	3	
DCE 209	Water and waste water engineering	2	1	-	

Note: L - number of lecture hours per week

T - number of tutorial hours per week

P - number of practical/ field work/ drawing office hours per week

2. Administration

Dr. Mrs. W. B. M. Thoradeniya continued her tenure as the Head of the Division of Civil Engineering Technology during the year 2011. Ms. M.D. Nirosha (Computer Application Assistant) assisted the administrative work of the division.

The Divisional Committee (DC) met on **03** occasions during the year 2011. The DC consists of all the permanent academic staff and two members representing the industry; **Eng. U. C. Pathirana**, Assistant General Manager (Planning and Design) of National Water Supply and Drainage Board and **Mr. Pujitha Uduwana**, Managing Director of Savinda Enterprises (Pvt) Ltd. All temporary staff and visiting lecturers were invited to participate as invitees.

The academic staff in the grades of Lecturer and above contributed to administration by functioning as the members of the Board of Studies. Dr. Mrs. W B M Thoradeniya and Mrs. P.S. Samarasekera contributed for administration by functioning as a member of Board of Management. All academic staff members conducted lectures and those who were appointed as examiners and moderators served in the relevant Board of Examiners.

3. Academic Activities

The division had been approved 12 carder positions for academic staff by 2007 carder allocations. The retirement and resignation of two ETAs up to the end of 2010 has reduced this number to 10. The authorities have been informed to allocate new carder post in lieu of such reduced post. However, the division had the services of only 7 academic staff members during the year 2011. The balance academic activities were carried out by employing contract, temporary and visiting staff. Academic staff comprised of permanent, temporary and visiting staff as listed under sections 3.4 and 3.5.

The division accomplished all the major academic responsibilities on time despite the continued shortage of qualified staff, which heavily burdened the remaining staff especially with the academic related other activities.

3.1 Student numbers in the division in year 2011

Table 3 – Student numbers of the division

Course Conducted	Year I	Year II
Civil Engineering Technology	79	83

3.2 Field Visits

The division was able to arrange 05 field visits for the second year students to enhance their theoretical knowledge.

3.3 Survey Camp

The annual survey camp was held from 2nd to 10th April 2012 at Diyagala Boys' Town Premises at Ragama for the NDT second year students. The camp was successfully completed with the participation of an external panel for the evaluation of students.

3.4 Achievements

Despite the difficulties faced by the division, it continued to produce its annual output of NDT diplomates in Civil Engineers.

3.5 Challenges

The division is grateful to Dr. T A G Gunasekera, the director of ITUM for continuing to teach the subject 'Water and waste water engineering' in addition to his regular subject 'Industrial Management in Civil Engineering Construction.' The subjects "Quantity Surveying', 'Building construction and draughtsmanship (Year II)' and 'Strength of Materials (Year II)' were handled by visiting lecturers.

Responsibilities of coordination work of some of the important practical classes were shouldered by the experienced temporary instructors. While the gratitude of the division for their services is recorded it is also noted the urgency of staff recruitment to fill the vacancies.

4 Academic Staff

Mrs. N. P. K. Semananda having completed her M. Sc at University of South Australia with outstanding results, was promoted to the post 'Lecturer (Pprobationary) on 16.09.2011. Eng. Alhaj M. Y. Zainudeen served the division as a Senior Lecturer on contract basis during the full academic year 2011.

Mr. R. Karunasena (Lecturer) retired on 31.12.2011 after serving the ITUM and the University for over 35 years and we wish to record our gratitude for his dedicated services as a lecturer and also as the Chief Student Counsellor on the later part. Mrs W. A. Indira (Lecturer-probationary) continued on study leave during the year 2011. Mrs. M. P. P. Danaseela who joined the Division on 16.06.2011 vacated post on 25.07.2011.

4.1 Permanent Staff

The list of academic staff, their divisional responsibilities and the contributions to the ITUM and the university and to the external institutions are given in Table 4.

4.2 Visiting Lecturers , Temporary Staff & Contract staff

Visiting Lecturers

- (1) Mr. DA Thevathasan
Qualifications: JTO-Civil
Lecturer In-Charge of Building Construction & Draughtsmanship (First year) and Building Construction (Second year)
- (2) Mr. R.D. Sirisena
Qualifications: NDT – Civil, MIIESL.
Lecturer In-Charge of Quantity Surveying (Second year)
- (3) Mr. KU Amarasekera
Qualifications: JTO – Civil, AMIE-Struct.'Eng.
Tutorial classes of Theory & Design of Structures (Second year)
Lecturer In-Charge of Strength of Material

Temporary Instructors

- (1) Mrs. WS Jayatunga - Coordinator of Strength of Materials Practical classes (First year)
- (2) Mrs. Harsha Galaboda – Coordinator of Fluid mechanics Practical classes (first year) and Tutorial and Practical classes in Water & Waste Water Engineering (Second year)
- (3) Mr. HKY Buddhika - Co-ordinator of Practical classes in Surveying and Levelling (Second year)

Instructors (On Contract basis)

- (1) Mr. HCIA Perera

4.3 Staff Participations in Seminars /Workshops etc.

The following staff members participated at the seminars on the subjects indicated and these were sponsored by the ITUM.

- I. Mrs. NPK Semananda (Lecturer –Pro.) – Water Resources Development
- II. Mrs. M. D. Nirosha (CAA) – Clerical Skills Development
- III. Mrs. Harsha Galabada (Temp. Instructor) – National Cleaner Products

5. Other Activities

One Laptop computer and a Projector were purchased as a number of lecturers started delivering lectures using presentations on 'power point' or similar software. A Notice board was purchased to the division as a long felt need. This enabled putting up of notices for the second year students. A Key cupboard was purchased to store duplicate key to all the staff rooms.

6. Research

Permanent staff members were engaged in non-funded research which became mandatory for the remuneration purposes.

7. Publications

Thoradeniya Bhadrane, Malik Ranasinghe and N T S Wijesekera (2011), Economic Analysis of Water Infrastructure: Have We Got It Right? Engineer, Journal of the Institution of Engineers, Sri Lanka, Vol. 44, No 2, April 2011.

Table 4 - Academic Staff

	Category	Name and Qualifications	Divisional responsibilities	Contribution to ITUM / University	Contribution to external institutions
1	SL – Gr I	Dr. T.A.G. Gunasekera, Ph.D. (Ireland), M.Sc. (First Class Honors) (Ireland), M.Eng. (Moratuwa), NDT (Civil Eng.), MIESL, FIIESL	• LIC DCE 202, DCE 209	• Director, ITUM	• Member NEC Standing Committee on Tertiary Technological Education.
2	SL – Gr II	Dr. Mrs. W.B.M. Thoradeniya, PhD (Moratuwa), M.Phil (Open University, Sri Lanka), M.Sc (Distinction) (Netherland), PG Diploma (Moratuwa), NDT (Civil Engineering), FIIESL	• LIC DCE 204	• Head/ Div. of Civil Engineering • Member BOM • Chairperson, BRD	• Examiner –Department of Technical Education and Training • Council member – IIESL
3	SL – Gr II	Dr. (Mrs.) I. N. Jayathileke Ph.D (Structural Engineering) (Moratuwa), M. Eng. (Hydraulic Engineering) (Moratuwa), B.Sc. Eng. (Moratuwa)	• LIC DCE 208	• Coordinator for in-plant training • Coordinator for NODES project	
4	SL – Gr II	Mrs. M. M. P. D. Samarasekera, M. Phil (Moratuwa), M. Eng. (Environmental Engineering & Management) (Moratuwa), B.Sc. (Eng) (Moratuwa)	• LIC DCE 203, DCE 206 (part), DCE • Co-ordinator (P) DCE 206, 102(part)	• Member BOM • Member Project Committee– <i>Project of re-location & Devel. of ITUM at Diyagama</i>	
5	Senior Lecturer (on contract)	Mr. M.Y. Zainudeen, M. Sc (Ireland), MIESL, FIIESL, C.Eng	• DCE 207		
6	Lecturer	Mr. R. Karunasena, M.Eng. (Moratuwa), AMIESL, NDT (Civil Eng) (H.S.T.I. Amparei)	• LIC DCE 206 (part) and DME 101 (part)	• Chief Student Counsellor	
7	Lecturer	Mrs. W. A. Indira, Professional Master Degree in Geoinformatics (ITC, Netherlands), B.Sc. Physical Science (Hons) (General) (Colombo), Diploma in Survey Technician (Advanced), Survey Department, Sri Lanka, Diploma in Photogrammetry (Germany)	On study leave		
8	Lecturer (Prob.)	Mrs. N.P.K. Semananda, M.Sc (Uni SA), NDT	• LIC DCE 101		

Note: LIC – Lecturer In-Charge

10.2 Division of Electrical, Electronics & Telecommunication Engineering Technology

1. Introduction

This division supports National Diploma in Technology (NDT) course under two programmes; Electrical Engineering Technology and Electronic, and Telecommunication Engineering Technology.

Under these two programmes students are trained in three engineering technology fields; Electrical, Electronic and Telecommunication and they are geared to meet the needs of the industry. The diploma holders play an important role that forms a link between Engineers and the rest of the work force in the industry by functioning as middle level technical managers in the above technical fields.

This division conducted following subjects for the NDT first year and second year programmes in year 2011.

First Year

Code	Subject	L	T	P	Courses
DEE 101	Electro-technology	2	1	2	CH, Civil, ME, NT, Text....
DEN 101	Electronics	2	1	2	EE, EN,MR
DEE 102	Principles of Electricity & Electrical Measurements	2	1	2	EE, EN,MR

Second Year

Code	Subject	L	T	P	Courses
DEE 202	Electrical Machines	2	1	3	EE
DEE 204	Power Controls and Electronics	2	1	3	EE
DEE 205	Power Systems	2	1	3	EE,
DEE 206	Wiring Diagrams & Electrical Constructions	2	1	3	EE,EN
DEN 202	Electronics & Telecommunications	2	1	3	EE
DEN 203	Industrial Electronics & Measurements	2	1	3	EE,EN
DIS 202	Mathematics	2	1	3	EE,EN
DME 204	Industrial Management	2	1	3	EE,EN
DME 208	Power Hydraulics & Fluid Machinery	2	1	3	EE
DEN 201	Electronics	2	1	3	EN
DEE 203	Electrical Machines & Power Systems	2	1	3	EN
DEN 205	Telecommunication I	2	1	3	EN
DEN 206	Telecommunication II	2	1	3	EN
DEN 204	Micro Processor Systems	2	1	3	EN

2. Administration

Mrs. B.A.S.Priyanka continued her term as the Head of the Division of Electrical, Electronics and Telecommunication Engineering Technology. Miss.H.M.P.P.Gunarathna and Miss.W.M.V.L.Vaas assisted the administration work of the division as the Computer Application Assistants.

The Divisional Committee (DC) met on 03 occasions during the year 2011. The DC consists of all the permanent academic staff and two members representing the industry. All temporary staff and visiting lecturers were invited to participate in academic duties as invitees.

The academic staff in the grades of lecturer and above contributed to administration by functioning as the members of the Board of Studies. All academic staff members in-charge of lectures served in the relevant Board of Examiners.

3. Academic Activities

12 Cadre positions for academic staff were approved for the division by 2008 carder allocations. However, the division had the services of only 8 academic staff members during the year 2011. The balance academic activities were carried out by employing temporary and visiting staff. Academic staff comprised of permanent, temporary and visiting staff as listed under section 3.4.

There were major setbacks in the academic activities of the division, which could be attributed to acute shortage of resources such as qualified staff and infrastructure subsequent to the official formation of the ITUM.

3.1 Student numbers in the division in year 2011

Course Conducted	Year I	Year II
Electrical Engineering Technology	40	37
Electronics/Telecommunications Engineering Technology.	41	40

3.2 Achievements

3.3 Challenges

The demand for NDT diplomates by industry out numbered the supply by a large margin. It was observed that practically all NDT Electrical, Electronics and Telecommunication diplomats got employed at the in-plant training period itself. This situation pre-empts an additional intake for Electrical and Electronic disciplines. Further an increase of qualified staff and infrastructure development are also eminent.

3.4 Academic Staff (Permanent) and Activities.

(1) Mrs. S.M.Kannangara continued her full time postgraduate studies in year 2011.

(2) Ms. K.Gamage continued her full time postgraduate studies in year 2011.

(1) Mr. D.G.U Solangarachchi

B.Sc.(Eng), M.Sc. (Southampton), Gd.Dip (Victoria), C.Eng, MIEE(Lond.), MIE(Aust.), MIE(SL)

Academic Duties : 01-01-2011 to 31-12-2011

Contribution to the Division:

- Conducted 05 lectures in the subjects DEN 203 and DEN 101 per week.
- Supervised 04 practical class in the subjects DEN 203 and DEN 101
- Member of in-plant training assessment panel.
- Member of TEC committees
- Member of Board of Studies & Board of Examiners
- Prepared specifications for lab equipments & consumables of Electronics & Telecommunication unit.
- Updated laboratory experiments(Electronics & Telecommunication)

Contribution to the ITUM/University

- Member of the hostel committee

Lecturer

(2) Mrs. S.M. Kannangara

B.Sc.(Special) Hons -

ITUM duties

- Conducted lectures and tutorials for DEN 201 (Industrial Electronics and Measurements)
- Conducted practicals in the Electronics laboratory for DEE101 ,DEN101 & DEN 201
- Served on Board of Studies, Board of Examiners
- Study leave with effect from 01.12.2011.

Outside Bodies

- Served on Implant training assessment panels arranged by NAITA

Staff Developments

- Registered for a M.phill at the Department of Electronics & Telecommunication – Faculty of Engineering UOM.
- Participated in a workshop on research competencies conducted by HETC.

(3) Mrs. B.A.S.Priyanka
B.Sc.(Gen.), M.sc.(Moratuwa)

ITUM duties

- Head of Electrical, Electronics & Telecommunication Engineering Technology with effect from 01.09.2010.
- Served on Board of Studies, Board of Examiners.
- Served on TECS, Leave & Awards committee.
- Conducted lectures, tutorials & practicals for DEE 101 (Electro Technology), DEE102 (Principles of Electricity & Electrical Measurements)
- Served in organizing committee of INCO exhibition.
- Served in organizing committee of NDT inauguration programe.

Outside Bodies

- Served on Implant training assessment panels arranged by NAITA.
- Conducted lectures in Physics at National Institute of Fisheries and Nautical Engineering.

(4) Mrs. D.Y.T. Bambarawanage
B.Sc.(Eng), M.Eng., C.Eng., MIE(SL)

ITUM duties

- Conducted lectures and tutorials for DEE 205 (Power Systems), DEE 203 (Electrical Machines & Power Systems).
- Conducted practicals in the Machines laboratory and Power Systems laboratory for DEE 203 (Electrical Machine & Power System), and DEE 205(Power Systems).
- Conducted practicals in the electronics laboratory for DEN 102, DEE 102 (electrical measurement and Electronics), DEE 101 (Principles of Electricity) and DNS 106 (Electronics).
- Set Question papers and corrected answer scripts of NDT 2nd year Examination of DEE 203(New Syllabus), DEE 205 (New Syllabus)
- Served on Board of Studies, Board of Examiners.

Outside Bodies

- Served on Implant training assessment panels arranged by NAITA.
- Served as a Student Counselor.
- Served as a member of several inquiry panels for student clashes.

Lecturer Probationary

(5) Ms. K. Gamage
B.Sc.(Eng.), M.Sc.(UKCC-UK), Mphil(SL)

ITUM duties

- Conduct DEE 202 Electrical Machines lectures, tutorial and practicals
- Conduct DEE 101 Electro Technology lectures and practicals
- Served on Board of Studies, Examiners
- Conduct research studies for PhD degree.

Outside Bodies

- Conducted lectures for Navy Artificer Training Institute
- Conducted lectures for National Institute of Fisheries and Nautical Engineering.

(6) Mrs. M.A.Bibile
B.Sc.(Special), M.Sc.(Westminster-UK)

ITUM duties

- Prepared lecture materials for DEN 201 (Electronics) and DEN 202 (Electronics & Telecommunications)
- Coordinated practicals in the Electronics laboratory
- Prepared specifications for the Electronics laboratory equipments & consumables.
- Updated laboratory experiments for Electronic course.
- Conducted lectures and examinations on DEN 201(Electronics) and DEN 202(Electronics & Telecommunications)

Outside Bodies

- Served on In plant training assessment panels arranged by NAITA

Staff Developments

- Completed the certificate in Teaching in Higher Education conducted by Staff Development Centre, University of Colombo and obtained SEDA accreditation.
- Participated in a workshop on Research competencies conducted by HETC.

(7) Mr. G.A.M.D.Wickramathilaka
B.Sc.(Eng) Hons. AMIE (SL)

ITUM duties

- Supervised and conducted practical classes on the following subjects
 - (i) DEE 202 Electrical Machines
 - (ii) DEE 204 Power control and Electronics
 - (iii) DEE 205 Wiring Diagrams & Electrical Installation.

- Conducted lectures and examinations on the following subjects
 - (i) DEE 205 Wiring Diagrams and Electrical Installation
 - (ii) DEE 204 Power control and Electronics
 - (iii) DEE 201 Applied Electricity
- Served as the Senior Treasurer of the NDT students union.
- Inspected student at in-plant training.
- Served in organizing committee of INCO exhibition.
- Served in organizing committee of NDT inauguration programe.

Staff Developments

- Participated in CTHE course conducted by University of Colombo.

Outside Bodies

- Served on In plant training assessment panels arranged by NAITA
- Served on course evaluation committees arranged by NAITA.
- Served as a member of the committee for preparation NDT training students on Electrical Engineering Technology.

(8) Eng. Gamini D. Nanayakkara,
 B.Tech(Eng), EC(UK), FTC(UK), MIE(SL),C.Eng(SL), MIEE(UK),C.Eng(UK), FIIIE(SL).

ITUM Duties

Conducted lectures, tutorials and examinations on the following subjects,

- (i). DEN 205 Telecommunications I
- (ii). DEN 206 Telecommunications II

Staff Developments

- Post graduate study leave for Mphil/ PhD programme

Outside Bodies

- Served on In plant training assessment panels member arranged by NAITA,

3.5 Visiting Lecturers and Temporary Staff

Visiting Lecturers

- 1) Mr. D.A.Wickramasinghe
- 2) Mr. S.A.Amarawansa
- 3) Mr. U.C.Botheju
- 4) Mr. K.P.S.Sudarshana

Visiting Instructors

- 1) Mr. K.G.Wimalasiri
- 2) Mr. W.K.S.Karunaratne
- 3) Mr. K.P.S.Sudarshana
- 4) Mr. R.Rajapaksha
- 5) Mr. M.S.Dunuweera
- 6) Mr. R.M.C.R.K.Rathnayaka
- 7) Mr. B.H.N.C.P.Buwanekabahu
- 8) Mr. S.M.W ijewardana
- 9) Mr. K.M.D.Rathnasuriya
- 10)Mr. W.D.D.P.Sumanapala
- 11)Mr. H.G.Wellaheva
- 12)Mr. R.D.U.H.Rajasingha
- 13)Mr. S.D.C.D.Subasinghe
- 14)Mr. T.M.Asalam
- 15)Mr. P.D.N.Senarathne
- 16)Mr. W.A.D.Premachandra
- 17)Mr. R.M.P.Fernando
- 18)Mr. K.S.K.Weranga
- 19)Mr. K.G.T.D.Chathuranga
- 20)Mr. W.D.D.P.Sumathipala

Temporary Instructors

- 1) Mr. K.D.C.N. Jayawardana
- 2) Mr. H.C.L.Kumara
- 3) Mr. A.M.C.R. Attanayake
- 4) Mr. N.G.L. Chandimal
- 5) Mrs. T.B.I.G.Silva
- 6) Mr. W.A.M.Wickramarathna
- 7) Mrs. P.R.Pathirage
- 8) Mr. R.A.K.P.Ranasinghe
- 9) Mr. W.S.Sameera
- 10)Ms. P.D.Jayalath
- 11)Mr. A.A.S.N.Jayalal
- 12)Mrs. M.A.R.Chithranganie
- 13)Mr. R.P.R.H.Rajapaksha
- 14)Mr. M.S.Dunuweera
- 15)Mr. B.H.N.C.P.Buwanekabahu
- 16)Mr. P.D.N.Senarathne
- 17)Mr. T.M.Asalam
- 18)Mr. W.D.D.P.Sumathipala
- 19)Mr. R.M.P.Fernando

4. Other Activities

Procurement of Computers / Lab Equipment / Library books / office equipment

5. Research

Following staff members conducted research either as a requirement for their promotions, or for self interest.

Staff member	Degree	Research Title
Mrs. S.M.Kannangara	M.Phil/ PhD	An Augmented Reality Surgical Simulator for Laparoscopic Cholecystectomy

10.3 Division of Mechanical Engineering Technology & Maritime Studies

1. Introduction

The Mechanical Engineering Technology & Maritime Studies Division awards the National Diploma in Technology (NDT) under three programmes; namely Mechanical Engineering Technology, Nautical Studies and Marine Engineering Technology.

These three programmes train students in three Engineering Technology fields and the syllabi of these programmes have been drafted to meet the needs of the industry. The diploma holders play an important role that forms a link between Engineers and the rest of the work force in the industry by functioning as middle level technical managers in technical fields. Further after obtaining higher qualification or gaining experience in relevant field the diplomats will be qualified to be appointed in senior managerial posts.

The revised curriculum was followed by first year and second year students. The part time certificate course on short course on Preparatory Course for Officer in-Charge of the Engineering Watchkeeping – 750kw or More is also conducting by this division.

The National Diploma in Technology course for Mechanical Students are conducted for three years where the first two years at the institution and the third year in plant training in an outside organization. The Marine Engineering Technology programme is conducted in similar manner and the Nautical Studies programme is conducted with a sea training experience during the second year.

This division conducted the following subjects for the NDT first year and second year programmes related to the aforesaid fields.

First Year - Mechanical

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practicals
DIS 103	Mathematics	3	1	-
DIS 101	English	2	1	-
DME 101	Applied Thermodynamics & Fluid Mechanics	2	2/2	2/2
DME 102	Automobile Technology	1	-	3/2
DEE 101	Electro-technology	2	1	2/2
DME 103	Engineering Drawing	1	-	3
DCE 102	Engineering Mechanics & Strength of Materials	2	2/2	2/2
DIS 102	Introduction to Information Technology	1/2	-	1/2
DCH 102	Properties of Materials	2	-	-
DME 104	Workshop Technology I	1	-	3
	Total	17	5	10.5

Second Year - Mechanical

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practicals
DIS 202	Mathematics	2	1	-
DME 204	Industrial Management	2	-	-
DEE 204	Applied Electricity	2	1	3/2
DME 201	Applied Thermodynamics II	2	1	3/3
DME 202	Engineering Drawing & CAD	1	-	3
DME 203	Engineering Mechanics & Machine Design	2	2	3
DME 205	Manufacturing Technology	2	-	9
DME 206	Pneumatic Controls & Instrumentation	1	-	3/6
DME 207	Power Hydraulics & Fluid Machinery	2	-	3/6
	Total	16	5	18.5

Total Weekly Time Allocation **First Year** - **32.5 hours**
Second Year - **39.5 hours**

First Year - Nautical Studies

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practicals
DIS 103	Mathematics	2	1	-
DIS 101	English	2	-	1
DNS 101	Cargo Work & Seamanship I	2	-	1
DEE 101	Electro-technology	2	1	2/2
DCE 102	Engineering Mechanics & Strength of Materials	2	2/2	2/2
DNS 102	General Ship Knowledge	2	-	-
DIS 102	Introduction to Information Technology	1/2	-	1/2
DNS 104	Meteorology I	2	-	-
DNS 105	Navigation I	4	-	2
DNS 103	Marine Operation I	2	-	1
	Total	21	3	7

Second Year - Nautical Studies

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practicals
DIS 201	English	2	-	-
DNS 201	Cargo Work & Seamanship II	3	-	6
DNS 202	Electronic Navigation Systems	2	-	-
DNS 203	Marine Operation II	2	-	2
DNS 204	Meteorology II	2	-	-
DNS 205	Navigation II (Celestial)	2	-	3
DNS 206	Navigation II (Coastal)	1	-	3
DNS 207	Ship Construction	2	-	-
DNS 208	Ship Stability	2	-	-
	Total	18	-	14

Total Weekly Time Allocation**First Year - 31.0 hours****Second Year - 32.0 hours**

First Year – Marine Engineering Technology

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practicals
DIS 103	Mathematics	3	1	-
DIS 101	English	2	1	-
DME 101	Applied Thermodynamics & Fluid Mechanics	2	2/2	2/2
DEE 102	Electrical Measurement & Basic Electronics	2	1	2/2
DME 103	Engineering Drawing	1	-	3
DCE 102	Engineering Mechanics & Strength of Materials	2	2/2	2/2
DIS 102	Introduction to Information Technology	1/2	-	1/2
DMR 101	Marine Engineering Knowledge	4	-	-
DEE 103	Principles of Electricity	2	1	2/2
DME 104	Workshop Technology I	1	-	3
	Total	19	6	10

Second Year – Marine Engineering Technology

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practicals
DMR 201	Engineering Knowledge (General)	3	-	3/3
DMR 202	Engineering Knowledge (Motor)	2	1	3/3
DMR 203	Instrumentation and Control Systems	2	-	-
DMR 204	Marine Engineering Drawing	1	-	2
DMR 205	Maritime Safety and Law	1	-	-
DME 206	Mechanical Engineering Technology	2	2	3/3
DMR 206	Naval Architecture and Ship Construction	4	-	-
DMR 207	Ship Board Electrical Systems	1	-	-
DME 209	Workshop Technology II	2	-	4
	Total	18	3	9.0

Total Weekly Time Allocation **First Year** - **35.0 hours**
Second Year - **30.0 hours**

2. Administration

Head of the Division Eng. MIRT Fernando (up to 31st March 2011), Eng. KM Ranasiri (01st April 2011 up-to-date) and Ms. IU Samaranyake assisted the Clerical & Computer Application Assistance work of the Division.

The divisional committee met on four occasions during the year 2011. All academic staff members contributed to administration by functioning as the members of the Board of studies. Further, the Management Representative called meetings as a requirement for ISO certification. All academic staff members in-charge of lectures served in the relevant Board of Examiners.

3. Academic Activities

Two academic staff members (Dr. AM Muzathik & Mr. JMP Gunasekara) were on study leave to earn a PhD and MSc. But both of them have come back to join the academic programme and PDC Kumara lecturer (Probationary) assumed the duties on 01-11-2011 and now division had the services of eight academic staff members.

3.1 Student numbers in the division in year 2011

Course Conducted	Year 1	Year 2	Year 3
Mechanical Engineering Technology	59	53	51
Nautical Studies	13	17	15
Marine Engineering Technology	14	19	19

3.2 Achievements / Challenges

The division was able to arrange several field visits for both first year and second year students to make them aware of field related industries.

The part time certificate course on Preparatory Course for Officer in-Charge of the Engineering Watchkeeping – 750kw or More and the duration of the three months.

The curriculum was revised. Topics relevant to the existing demands and the changes in the maritime field have been started to include in the syllabi to meet the requirements of the industry. Also updating of Lecturer Notes of Maritime Studies to cater for the requirements of the maritime industry was also started.

3.4 Academic staff (Permanent) and Activities.

a) Eng. KM Ranasiri (Senior Lecturer Gr.II)

B.Sc.(Eng.) (Moratuwa), PG Dip. in Industrial Engineering, MIAE (SL), C.Eng., MIE (SL), M.Tech (Industrial Engineering)

- Conducted lectures in the following subjects
 - DME 104 -Workshop Technology I - NDT 1st Year Common Subject
 - DME 209 -Workshop Technology II - NDT 2nd Year Marine Subject
 - DME 205 - Manufacturing Technology - NDT 2nd Year Mechanical Subject

In addition, he was involved in other activities as,

- Head of the Mechanical Engineering Technology & Maritime Studies Division (01st April 2011 up-to-date)
- Member of the Board of Studies
- Student Counselor
- Chairman of Timetable Committee up to 31st March 2011
- Chairman of Seat arrangement for Award Ceremony

b) Dr. AM Muzathik (Senior Lecturer Gr.I)

B.Sc.(Eng)(Hons), M.Eng. (Energy), PhD (Maritime Technology) CMar.Sci(UK), CEng(SL),MIAE(SL), MIE(SL),FIMarEST

- Conducted lectures and practical in the following subjects
 - DME 203 – Engineering Mechanics & Machine Design - NDT 2nd year
 - DME 209 – Workshop Technology II - NDT 2nd year
 - DME 205 – Manufacturing Technology -NDT 2nd year

In addition, he was involved in other activities as,

- Member of the Board of Studies
- Chairman Research Standing committee

c) Eng. MIRT Fernando (Senior Lecturer Gr.II)

Grad.M.I.Mech E (UK), MBA, M.I.M.(SL), LL.B., MIE (SL), Attorney-at-Law, Chartered Engineer

- Conducted lectures and practical in the following subjects
 - DME 204 – Industrial Management - NDT 2nd year Common subject
 - DME 104 – Workshop Technology I - NDT 1st year Common subject

In addition, he was involved in other activities as,

- Head of the Mechanical Engineering Technology & Maritime Studies Division (up to 31st March 2011)
- Member of Board of Studies

d) Mr. GG Jayarathne (Senior Lecturer Gr.I)

*M.Sc.(Marine/Mech.Eng),M.Phil.(Marine/Mech.Eng),CEng(UK), IMarEST(UK),
CMarEng(London), MSNAME (USA), MBE (UK)*

- Conducting Lecturers and practical classes in following subjects
 - DMR 101 - Marine Engineering Knowledge - NDT 1st Year Marine
 - DMR 204 - Engineering Drawing - NDT 2nd Year Marine
 - DMR 206 - Ship Construction - NDT 2nd Year Marine

In addition, he was involved in other activities as,

- Member of the Board of Studies

e) Mr. JMP Gunasekara (Lecturer) (Study Leave)

B.Sc.(Eng.) (Moratuwa), PG Dip. in Manufacturing Technology (Moratuwa), MIE (SL), AMIE (SL)

- Conducting Lecturers and practical classes in following subjects
 - DME 203 - Engineering Mechanics - NDT 2nd Year Marine/Mechanical
 - DME 206 - Pneumatic Control & Instrument - NDT 2nd Year Marine/Mechanical

In addition, he was involved in other activities as,

- Member of the Board of Studies
- Management Representative

f) Mrs. NV Kularathne (Lecturer)

B.Sc.(Eng.) (Peradeniya), M.Sc. (Comp.Sc.) (Colombo), MIE (SL), AMIE (SL)

- Conducting Lecturers and practical classes in following subjects
 - DME 201 - Applied Thermodynamics II - NDT 2nd Year Marine
 - DMR 204 - Marine Engineering Drawing - NDT 2nd Year Marine
 - DME 203 - Machine Design - NDT 2nd Year Mechanical

In addition, she was involved in other activities as,

- Member of the Board of Studies
- Chairman of timetable committee from 1st April 2011

g) Mrs. JB Samarasinghe (Senior ETA)

B.Sc.(Eng.) (Moratuwa)

- Conducted lectures and practical in the following subjects
 - DCE 102 - Engineering Mechanics - NDT 1st Year Common Subject

In addition, she was involved in other activities as,

- Member of the Board of Studies

h) Miss. B Balasumramanium (ETA)

B.Sc.(Eng.) (Moratuwa)

- Conducted lectures and practical in the following subjects
 - DME 207 - Power Hydraulics & Fluid Machinery - NDT 2nd Year Common Subject

In addition, she was involved in other activities as,

- Member of the Board of Studies

i) PDC Kumara (Lecturer Probationary)

B.Sc.(Eng.) (Moratuwa)

- Conducted lectures and practical in the following subjects
 - DME 101- Applied Thermodynamics - NDT 2nd Year
 - AutoCAD - NDT 2nd Year

In addition, he was involved in other activities as,

- Member of the Board of Studies

3.5 Visiting Lecturers / Temporary Staff

Visiting Lecturers

	Visiting lectures	Hours per year
1.	Dr. MV Mendis	104
2.	Mr. IDS Waidyasekara	208
3.	Mr. NKT Abeynayake	260
4.	Mr. NAG Abeywardana	156
5.	Mr. DLPM Rathnasingha	20
6.	Ms. RIK Chandrasena	104
7.	Mr. KWL Perera	156
8.	Mr. G Jayanthan	104

Visiting Instructors

	Visiting Instructors	Hours per year
1.	Dr. MV Mendis	104
2.	Mr. NKT Abeynayake	260
3.	Mr. IDS Waidyasekara	728
4.	Mr. KWL Perera	676
5.	Mr. TWDY Wijayarathne	624
6.	Mr. NAG Abeywardana	52
7.	Mr. BMD Jayasundara	832
8.	Mr. AK Maharachchi	1144
9.	Mr. AJ Victor	780
10.	Mr. HAJA Kumara	156
11.	Ms. RIK Chandrasena	936
12.	Mr. G Jayanthan	513
13.	Com. DP Nandasiri	104
14.	Mr. KMD Rathnasuriya	264
15.	Mr. KKV Gunawardana	105
16.	Mr. AHM Ziyad	228

Assistant Project Officers

Out of these 5 officers 3 officers have been engage in a given point of time right though out the year.

	Name	Hours Per Week
1.	Capt. LS Dissanayake	08
2.	Capt. NPP Liyanage	06
3.	Capt. SM Kankanamge	06
4.	Capt. PS Dias	06
5.	Capt. KR Abegunawardana	06

Note : IMarEST Lectures are conducting lectures on professional subjects (Nautical & Marine 2nd Year Subjects except Ship Construction)

Temporary staff

Three temporary instructors extended their support to carry out the practical and tutorial classes.

Temporary Instructors

1.	Ms. K Katheesan
2.	Mr. RKA Rathnayake
3.	Mr. BNEM Mendis
4.	Mr. KKV Gunawardhana

1. Other Activities

- Preparation of new set of lecturer notes for Marine Engineering & Nautical Studies
 - ISO certification Audit was conducted
 - Shipping Ministry MSD Audit was conducted
2. **Research All the Academic staff members are involved with research activities**
 3. **Publications**
 4. **Staff participation in seminars/workshops etc.**

10.4 Division of Polymer, Textile & Chemical Engineering Technology (ITUM)

1. Introduction

This division delivers National Diploma in Technology (NDT) under three programmes; Polymer Technology, Textile & Clothing Technology and Chemical Engineering Technology.

These three programmes train students in three engineering technology fields; Polymer, Textile & Clothing and Chemical and they are geared to meet the needs of the industry. The diploma holders play an important role that forms a link between Engineers and the rest of the work force in the industry by functioning as middle level technical managers in technical fields.

The revised curriculum was followed by both first year and second year students. The part time certificate course on Polymer Technology was also conducted by the division during weekends.

This division conducted the following subjects for the NDT first year and second year programmes.

First Year

Code	Subjects	L	T	P	Courses
DCH 102	Properties of Materials	2	-		CH,CE, ME,EE,EN,TT,PT
DPT 101	Polymer Science and Technology	2	1	3/2	PT
DTT 101	Raw Material and Fiber Science	2	-	3/3	TT
DTT 102	Yarn Manufacture	2	1	3/3	TT
DCH 101	Process Engineering Technology	2	-	3	CH

Second Year

Code	Subjects	L	T	P	Courses
DPT 201	Latex Technology	2	1	3	PT
DPT 202	Manufacturing Technology of Rubber Products	2	1	3/3	PT
DPT 203	Polymer Engineering and Process Control	2		-	PT
DPT 204	Manufacturing Technology of Plastic Products	2	1	3/3	
DPT 205	Polymer Science	2	1	-	PT
DPT 207	Polymeric Materials	2	1	-	PT
DPT 208	Quality Control and Testing of Polymers and Polymer Products	2	1	3/3	PT
DTT 201	Coloration and Finishing Technology	2	1	3/3	TT
DTT 202	Knitting Technology	2	-	3/3	TT
DTT 203	Product Initiation	2	-	6	TT
DTT 204	Production Organization and Management	2	1	-	TT
DTT 205	Statistics & Quality Control	2	1	-	TT
DTT 206	Textile Testing and Equipment Technology	2	-	2x 3/3	TT
DTT 207	Weaving Technology	2	-	2x 3/3	TT
DCH 201	Environmental Technology and Occupational safety	2	-	3/3	CH
DCH 202	Fuels & Lubricants	2	1	3/2	CH
DCH 203	Heat & Mass Transfer	2	1	3/3	CH
DCH 204	Instrumentation and Process Control	2	-	-	CH
DPT 206	Polymer Technology	2	1	3/3	CH
DCH 205	Separation Processes	2	1	3/2	CH

2. Administration

Mrs. P.N.P.Fonseka continued her term up to 30.10.2011 as the Head of the Division and Ms.S.L.Jayasuriya was appointed on Head of the division. Ms.P.A.D.K.N.Abeysinghe assisted the Clerical & Computer Application Assistance work of the Division.

The divisional committee met on eight occasions during the year 2011. All academic staff members contributed to administration by functioning as the members of the Board of studies. All academic staff members in-charge of lectures served in the relevant Board of Examiners.

3. Academic Activities

The division had the services of eleven academics staff members. Out of the ten academic staff members, there were on study leave but they contributed to carry out the academic work.

3.1 Student numbers in the division in year 2011

Course Conducted	Year 1	Year 2
Polymer Technology	22	23
Textile and Clothing Technology	53	47
Chemical Engineering Technology	24	24

3.2 Achievements / Challenges

The division was able to arrange several field visits for both first year and second year students to make them aware of the field related industries in the three fields.

3.4 Academic staff (Permanent) and activities.

Senior Lecturer - Grade II

j) Ms.S.L.Jayasuriya

B. Text.(Baroda), M.Sc.(Leeds), CText., FTI

She delivered lectures and conducted practicals in the following subjects

- DTT 207 Weaving Technology
- DTT 202 Knitting Technology

In addition, she was involved in other activities as,

- Member of the Board of Studies
- Committee Member of the Textile Institute Sri Lanka - section

- Visiting Lecturer, Department of Textile and Clothing Technology, University of Moratuwa, for B.Sc.Engineering Course.
- Coordinator to present students projects to INCO exhibitions.
- Coordinator for arranging inplant training placement in the industry for students following NDT course.
- Head of the division from 01.11.2011
- Coordinator for selection of overall best student award, awarded by MAS Holdings.

k) Ms.K.M.W.Abeykoon

B.Sc. (Eng.) (Moratuwa), M.Phil.(Kelaniya), CText., ATI

She delivered lecturers in the subject, DTT 204 Production Organization and Management. and conducted practicals in Textile Testing Equipment Technology and sewing.

In addition, she was involved in other activities as,

- Member of the Board of Studies.
- Visiting Lecture for the M.Sc. Course on Textile & Clothing Engineering conducted by the Faculty of Engineering University of Moratuwa.

l) Dr. M.A.B.Prashantha

B.Sc.(Hons)(Sri Jayawardhanapura), Ph.D(Moratuwa)

(03.02.2011 to 30.07.2011)

He conducted lectures in the following subjects

- DPT 207 Polymeric Materials.
- DPT 205 Polymer Science.
- DPT 206 Polymer Technology.
- Surface coatings. for part-time Certificate course.

In addition, he was involved in other activities as,

- A Visiting Lecturer at the Department of Chemical & Process Engineering University of Moratuwa.

Conducted lectures in the following subjects.

- Chemistry for Engineers (Level 1 students of the Undergraduate course)
- Chemical Thermodynamics (Level 1 students of the Undergraduate course)
- Chemical Kinetics (Level 4 students of the Undergraduate course)
- Member of Board of studies
- Student Councilor

Lecturer

m) Ms.P.N.P.Fonseka

Dip. in Petroleum Processing & Petrochemical Industry (Rumania)
M.Sc. (Brad), AMIE (SL), AMI Chem.E. (UK)

She delivered lectures in the following subjects

- DCH 102 Properties of Materials
- DCH 101 Process Engineering Technology
- DCH 202 Fuels and Lubricants
- DCH 205 Separation Processes.

Further, she conducted practicals in Process Engineering Technology, Fuels & Lubricants, Separation Processes and Heat & Mass transfer.

In addition, she was involved in other activities as,

- Head of the Division (30.10.2011)
- Member of the Board of Studies
- Student councilor
- Visiting Lecturer at Ocean University, Mattakkuliya

n) Mr.M.D.S.A.Amarasiri

B.Sc. (Ruhuna), Certificate in Polymer Technology, M.Sc. (Moratuwa)

He delivered lectures and conducted practicals in the following subjects

- DPT 208 Quality Control and Testing of Polymers and Polymer Products.
- DPT 202 Manufacturing Technology of Rubber Products

In addition, he was involved in other activities as,

- Research work for a M.Phil.Degree.
- Industrial Training Coordinator of the Polymer Division
- Member of the Board of Studies.

Lecturer (Probationary)

o) Mrs. W.P.S.K.Perera

B.Sc. (Eng.) (Moratuwa), M.Sc. (in progress)

She delivered lectures in the following subjects

- DTT 203 Product Initiation

Further, she conducted practicals in Equipment Technology and Product Initiation.

In addition, she was involved in other activities as,

- Research work for a M.Sc Degree
- Member of Board of Studies
- Visiting Lecturer, Department of Textile & Clothing Technology, University of Moratuwa.

p) Ms.K.M.D.Silva

B.Sc. (Colombo), M.Sc. (Moratuwa), M.I.Chem.C

On study leave, doing postgraduate studies in UK.

q) Ms.M.C.W.Somaratne

B.Sc. (Special) (Peradeniya), M.Sc. (Sri Jayawardhanapura)

She delivered lectures in the following subjects

- DPT 101 Polymer Science & Technology
- DPT 201 Latex Technology

Further, she conducted practicals in Polymer Science & Technology and Latex Technology.

In addition, she was involved in other activities as,

- Research work for a PhD Degree
- Visiting Lecturer for the part-time certificate course in Polymer Technology.
- Visiting Lecturer for the Rubber Graduateship course conducted by the Institute of Plastic and Rubber.
- Member of the Board of Studies

r) Mrs.G.K.Jayatunga

B.Sc. (Eng.) (Moratuwa), M.Sc. (Moratuwa), AMIE(SL)

- Delivered lectures in the subject DPT 203 Polymer Engineering & Process Control
- Conducted practicals in 'Separation Processes'

- Delivered lectures in the subject DCH 201 Environmental Technology & Occupational Safety
- Member of Board of Studies.

s) Mr.H.D.S.S.Karunaratne

B.Sc. (Eng.) (Moratuwa)

(Appointed 17.10.2011)

He conducted lectures and practicals in the following subjects

- DCH 204 Instrumentation and Process Control

Senior Engineering Teaching Assistant

Engineering Teaching Assistant -Grade I

t) Mr. A.H.L.K.Amarasekara

B.Sc. (Sri Jayawardhanapura), PG Dip. in Text. Tech. (Moratuwa), M.Sc. in Textile & Clothing Management at University of Moratuwa.

He conducted lectures and practicals in the following subjects,

- DTT 201 Colouration and Finishing Technology
- DTT 101 Raw Materials & Fiber Science
- DTT 206 Textile Testing (30 hrs).

In addition, he was involved in other activities as,

- Industrial Training Coordinator of the Textile Division.
- Coordinator Inco Exhibition.
- Visiting Lecturer, Department of Textile & Clothing Technology, University of Moratuwa.

3.5 Visiting Lecturers / Temporary Staff

Visiting Lecturers

	Name
5. Polymer Technology Division	Dr.(Mrs.) Olga Gunapala
	Dr.M.A.B.Prashantha
	Ms.S.U.Lokubalasuriya
6. Chemical Eng. Technology	Dr.(Mrs.) Olga Gunapala
	Mr.S.Wijayasinghe
7. Textile Technology	Mr.M.Y.A.Perera
	Dr.W.D.G.Lanarolle
	Mr.Ranga Abeysooriya
	Dr.Sadun Fernando
	Mr.E.A.S.K.Fernando

Temporary Instructors

- a) Ms. A.D. Weerakoon
- b) Ms. G.B.C. Gamhewa
- c) Mr. H.D.S.S. Karunaratna
- d) Ms.N.D.I.K.Kumarage

8. Research

Staff member	Research Title
u) Mr.H.D.S.S.Karunaratne	<ul style="list-style-type: none">• Investigation of stability of ananerobic digestion in plug flew reuctors by mathematical medling.

9. Publications

- a) Dr.M.A.B.Prashantha
 - o Synthesis of alkyd resins from blend of rubber, seed oil & soya bean oil.

b) Ms.M.C.W.Somarathne

- The Asian international conference on Materials, Minerals and Polymer 2012

Paper entitled: Reinforcement of natural rubber latex films through surface modified silica with macromolecular coupling agent.

b) Mr.H.D.S.S.Karunaratne

- H.D.S.S.Karunaratne, B.M.W.P.K.Amarasinghe, suger cane based activated carbon as an adsorbent for phenol removal from aqueous solutions.proceedings of 3rd international conference on chemical engineering 2011. December 29-30, Bangladesh university of Engineering and Technology (BUET)

10.5 Division of Interdisciplinary Studies

Introduction

The Division of Interdisciplinary Studies was formed with the establishment of the Institute of Technology of the University of Moratuwa in October 2000. The Division conducts courses in the subjects, English, Mathematics and Computer Science for the National Diploma in Technology Students. The academic staff of the Division includes several experienced teachers who had been serving in the Faculty of Engineering prior to the establishment of the institute.

Mathematics courses offered by the Division emphasize on teaching the basic concepts of Mathematics, the development of rational thinking in formulating and solving engineering and technical problems and the application of mathematical knowledge in solving practical problems. During the first year 3 hours of lectures and a one-hour tutorial class is allocated per week to teach the basic concepts of Mathematics (including statistics) which would enable students to apply mathematical knowledge in solving practical problems of the field subjects. Student's proficiency is assessed continuously by the assignments given in the tutorial classes during the course of the year.

During the second year the Division conducts two hours of lectures and a one hour tutorial class in mathematics per week with the aim of providing students further knowledge in Mathematics (Including Statistics) which will be useful for students in formulating and solving engineering and technical problems in their careers. Mathematics staff in the division covers Quality control and Statistic part of the Testing, Quality Control and Statistics subject for Textile Technology second year students. As Textile Industry needs more Statistics and Quality Control. This course is specially design for Textile Technology Students.

English courses conducted by the Division place emphasis on English for technological studies as well as English for general communication. A Foundation course in English is conducted for all newly admitted students annually, prior to the commencement of the 1st year academic programme. The duration of the course is usually 06 – 07 weeks. Thereafter, three hours per week is allocated for the subject in the NDT first year timetable. Students' proficiency is assessed by a scheme of continues assessments. During the second year an English course is conducted (two hours per week) for Marine and Nautical studies students. Course material produced by the staff is used in English classes and students are given the opportunity to master the different skills of learning the language.

The Division offers the course, Introduction to Information Technology to all first year students with the objective of imparting a basic knowledge of Information Technology and Computer Science. A foundation course in Information technology is offered to a selected number of students prior to the commencement of the academic programme. A one-hour lecture and a one hour practical/tutorial class are allocated per week for the subject during the first year. A continuous assessment process is carried out to assess students' knowledge.

Courses Conducted by the Division

First Year

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practical
DEL 101	English (For Marine & Nautical Std)	2	-	1
DIS 102	Mathematics	1	-	1
DIS 103	Textile Testing, Quality Control and Statistics	3	1	-

Second Year

Code	Subjects	Weekly Workload		
		Lectures	Tutorials	Practical
DIS 201	English (For Marine & Nautical Std)	2	-	-
DIS 202	Mathematics	2	1	-
DTT 201	Textile Testing, Quality Control and Statistics	1	1	-

2. Administration

Mrs. P.S. Yatapana was assumed duties as the Head of the Division, since 11th August, 2011. The staff met regularly to discuss academic and general issues pertaining to the Division. All permanent/Temporary and Visiting Staff participated at these sectional / divisional meetings.

The academic staff contributed to the administration by functioning as members of the Board of Studies and as members of different committees from time to time. All academic staff members served in the relevant Board of Examiners.

3. Academic Activities/ Achievements / Challenges

The Division has a carder allocation of 10 positions and had 7 positions filled up to the year 2011. One staff member continued to be on study leave. The balance academic activities were carried out by employing temporary /visiting staff. The academic staff comprised permanent, temporary and visiting staff as listed under section 3.1 & 3.2.

There were no major setbacks to the academic activities of the division but shortage of resources and delays in procurement hampered the activities of the division. Lack of space to accommodate staff was also an impediment.

Computer aided English language classes were conducted successfully, as the component of the 1st year English Programme The foundation course in English was conducted successfully in 2011. As a result changes had to be made in the 1st year English programme. The foundation course in English was conducted successfully in 2010. A short course in English for 2nd Year Nautical Students was conducted in December, 2011.

A major challenge during 2011 was the difficulty in recruiting English teachers to conduct classes in the Foundation course in English which is usually conducted for 07 – 08 weeks during the months of October / November annually a challenge this year too. This was mainly due to the unattractive remuneration offered to qualified visiting staff. This trend is expected to continue unless measures are taken to address the issue immediately.

3.1 Academic Staff (Permanent)

Category	Name & Qualifications
Senior Lecturer Gr. II	Mrs. S. Nagodavithana B.A. (Sri Jayawardhanapura) M.A. (Kelaniya), M. Phil. (Kelaniya)
Senior Lecturer Gr. II	Mrs. PS Yatapana B.Sc. (Sri Jayawardhanapura) PG Dip. (Stat.) (Sri Jayawardhanapura) PG Dip. (Applied Stat.) (Colombo) M.Sc. (Colombo) M. Phil (Colombo)
Lecturer	Mrs. CPN Attygalle B.Sc. (SL), M.Sc. (Colombo)
Lecturer	Mrs. MV Dasanayaka B. A. (Peradeniya), M.A. (Kelaniya),
Lecturer (Probationary)	Mrs. SC Matugama B.Sc. (Colombo), M.Sc. (Moratuwa)
Lecturer (Probationary)	Ms. K Galappaththi B.Sc. (Ruhuna), M.Sc. (Colombo)

The Division obtained the services of the following staff on a temporary / visiting basis for the year 2011.

Ms. DDGADS Saparamadu	Temporary Lecturer (Mathematics)
Ms. RK Surangi	Temporary Instructor (Information Technology)
Ms. MDS Senavirathne	Temporary Lecturer (Information Technology)
Ms. MDSS Weerasinghe	Temporary Lecturer (English)
Mr. TI Alles	Visiting Instructor (English)

In addition the services of 12 visiting instructors were obtained to conduct the Foundation course in English in October / November 2011.

3.2. Activities of Individual Members of the Division during the year

Mrs. PS Yatapana

- Duties as Head of the Division
- Coordinated ITUM Activities at the L-Block
- Co-ordinator of NDT First Year Mathematics Course
- Member of Orientation Committee
- Followed a P.G Diploma course in Psychology and Counseling at National Institute of Psychological & Counseling in Sri Lanka.
- External Supervisor of M.Sc. In applied Statistics Project.
- Council member of the institute of applied statistics Associations Sri Lanka.
- Secretary of the Institute of Technology University of Moratuwa Association of Teachers'

Mrs. S. Nagodavithana

- Co-ordinated the 1st Year English Course
- Co-ordinate the Foundation Course in English
- Developed and coordinated a short course for NDT Nautical students
- Preparation of ELT Materials

Mrs. CPN Attygalle

- Student Counselor, ITUM
- Chairperson, Scholarships ad Awards Committee ITUM
- External Supervisor of M.Sc. In applied Statistics Project.

Mrs. MV Dasanayaka

- Co-ordinate the Intensive English Programme
- Co-ordinate the First Year English assessments

Mrs. SC Matugama

- Member of Time Table Committee
- Member of Orientation Committee
- Co-ordinate First and second year tutorials/assignments in Mathematics
- Member of scholarships and Awards Committee, ITUM.

Ms. K Galappaththi

- Designed and developed ITUM web site
- Member of ITUM Hand Book Committee
- Member of a Technical Evaluation Committee
- Examiner of "Promotion to the post of Computer Application assistant Grade II examination"

Ms. Matugama continued to be on study leave reading for her Ph.D.

10.6 Summary Details of Academic Staff

Division	Subject	Medium	Senior Prof.	Prof.	Senior Lecturer	Lecturer	ETA	Instructors
Civil Eng. Tech.	Civil Eng.	English	-	-	04	01	-	03
Mechanical Eng. Tech. & Maritime Studies	Mechanical Eng.	English	-	-	04	02	02	04
Polymer, Textile & Chemical Eng. Tech.	Textile Polymer Chemical	English	-	-	02 01 -	01 04 02	01 - 01	04
Electrical, Electronics & Telecommunication Eng. Tech.	Electrical Electronic	English	-	-	- 01	05 04	- -	10 12
Interdisciplinary Studies	Maths IT English	English	-	-	01 - 01	02 01 01	- - -	02
Total					15	22	04	29

11. Details of Non Academic Staff.

Faculty / Branch	Most Senior	Senior Staff	Junior Staff	Minor Staff
Finance Division	-	01	05	01
Director Office	-	02	05	02
Division of Civil Eng. Tech.	-	-	01	-
Division of Mechanical Eng. Tech.	-	-	01	-
Total	-	03	12	03

12 Learning Resources and Student Support

Learning Infrastructure

- 1 The institution identifies infrastructure availability as a key factor determining its success in achieving the set goals. Being established within the University of Moratuwa under the condition that no space or facilities are provided extra to what was used by the NDT programme before the year 2000, the improvements with regard to physical environment had been minimal during the past 10 years.
- 2 Available infrastructure is shared with the other student groups of the University. ITUM too has made investment to improve some such common facilities.

- 3 The Division of Civil Engineering Technology initiated activities to deliver its programme on-line, under the assistance of Distance Education Modernization program.

Library Services

The student of the ITUM use the library of the main university and share its facilities with the other students of the university. The ITUM funds were utilized to enhance the available resources. The facilities available at the University library are sufficient to meet the students present learning requirements.

Information Technology

- 1 Since year 2004 a new subject was introduced to the first year curriculum as 'Introduction to Information Technology' which is compulsory for all students.
- 2 Investments were made on computer software and hardware necessary for all programs. Eventhough, the basic essential requirements of the academic programmes are met, more infrastructure in IT is needed for meeting the requirements of effective teaching methods and students learning requirements.

Student feedback on learning resources

- 1 Two main methods are used to obtain students feedback: a) Lecture evaluation forms used by some staff members. b) Informal discussion with students.
- 2 The feedback from students are used for emphasizing the required changes in teaching methods, techniques and practicals etc. The decision making for resource allocation is also partly based on this feedback.

New programmes / Subjects and Resources

- 1 The introduction of new subject or improvement of existing subjects is the responsibility of the individual divisions and such changes are done at intervals in the form of curriculum revision. The syllabus changes are recommended by the Board of Studies for its implementation. The resources needed for such new programmes / subjects are provided by the ITUM either through existing resource sharing agreement with the university or directly by purchasing the requirements. Any other essential technological information arising in between curriculum changes are imparted to the students through supplementary, like guest lectures.
- 2 Most of the learning resources such as the access to internet, computer software are available centrally to all students. Some resources required by the specialized fields are available at the corresponding departments of the main university and the students use these facilities.

Career Development

- 1 The NDT programme has its final (3rd) year dedicated for industrial training. Engaging in this one year period in the industry make the students readily employable after completing their study programmes. A lecturer in industrial training is available for the effective management of industrial training.
- 2 The students are presented with at least two presentations/ seminars on professional and academic development opportunities available. The resource persons for these seminars are usually from the industry.
- 3 ITUM maintains relationship with the Institution of Incorporated Engineers, Sri Lanka (IIESL), which is the direct professional body for NDT diplomates. Annual industry exhibition conducted by the IIESL also provides an opportunity for students' career development through participation.

Communication with employers

The ITUM has limited forums for direct communication with the employers of its students. However, the representatives of prospective employers attend the assessment panels of industrial training assessments. This occasion provides an opportunity for the academic staff and the Heads of Divisions to meet and discuss their views and expectation with regard to the diplomats produced by the ITUM.

13. Link with the Industry

13.1 Industrial Training

Introduction

The bridge between academic studies at the University and professional competence as a Diplomate is the period of Industrial Training.

Objective

Industrial Training is to provide practical experience to enhance the understanding of the theoretical principles learnt and to acquire skills and competence in the relevant field with right work attitude in order to effectively contribute to Engineering Technology as a Diplomate.

Duration

Training was provided in two organizations during the period of twelve months from 6th February 2010 to 5th February 2011. No trainee was permitted to have training in one organization for more than six months.

Staff in charge of Training

Eng. T. R. D. Perera

C. Eng, M.I.E.[SL], M.I.T.D.[U.K.], M.I.Mgt[U.K.], M.I.I.E.[SL]

Student break-down by Field

Chemical	18
Civil	72
Electrical	37
Electronics and Telecommunication	35
Marine	15
Mechanical	49
Polymer	17
Textile & Clothing	43
Total that underwent Training	<u>286</u>

Competence and Commitment

The Roles and Responsibilities during Industrial Training:-

1. Maintain a sound theoretical approach to the application of technology in engineering practice.
2. Use appropriate scientific and engineering principles.
3. Use a sound evidence-based approach to problem-solving and quality enhancement.
4. Develop, review and select techniques, procedures and methods to undertake engineering tasks.
5. Contribute to design and development.
6. Identify problems, evaluate options and formulate solutions taking cost, benefits safety quality, reliability, appearance and environmental impact onto account.
7. Determine evaluation criteria and monitor and assess operations against the criteria.
8. Plan, implement and co-ordinate activities against objectives.
9. Assist in the preparation and control of budgets and operate within the financial and commercial constraints of an organization and the overall statutory framework.
10. Use people management skill and provide leadership in the working environment, supporting and developing team members and managing groups and projects.
11. Manage continuous improvement processes.
12. Work and communicate with others at all levels.
13. Effectively present and discuss ideas and plans.
14. Build teams and negotiate.
15. Comply with the codes and rules of conduct.
16. Manage and apply safe systems of work.
17. Undertake engineering work in compliance with the codes of practice on risk and the environment.
18. Carry out continuing professional development necessary to ensure competence in areas and at the level of future intended practice.

Areas of Training

Training Guides were provided at the commencement of training so that the trainee could make every effort to cover the areas as much as possible in order to obtain an overall knowledge in the respective field.

Placement

The order of preference of the organizations the trainee wished to undergo training was selected, by the trainee prior to commencement of training, from the list of organizations forward by the National Apprentice & Industrial Training Authority (NAITA). Every possible effort was made to satisfy the choice of the organizations the trainee requested.

Assessment

At the end of each six months of training an oral assessment was held. The location, date and time was informed in advance by NAITA to the trainees. The assessment panel consisted of academic staff from ITUM, officers from NAITA and officers from the training organizations. The purpose of the assessment was to determine whether the trainee had acquired the expected skills and knowledge.

Seminar on Industrial Training

The above seminar was held of 5th February 2008 for all the 3rd year students. Speakers from the industry were invited to give presentations. The Institute issued a booklet on “General Guidelines on Training” and officials from NAITA issued the placement letters and other documents to the trainees.

13.2 Employment

The ITUM faces the difficulty in setting up of a carrier guidance unit of its own due to the prevailing limitation in space allocations. Nevertheless, the lecturer in charge of Industrial Training is the link for employment at the ITUM. Inquiries for newly passed out Diplomates are sent to prospective employers at their request. A data base is not maintained with regard to previously passed out Diplomates. Hence if such inquiries are received the contact details of these Diplomate are forwarded to prospective employers so that they directly make contacts and find suitable candidates.

13.3 Guest Lectures

During the first two years students are given an opportunity to participate in guest lectures which are held at the institute premises. These lectures are on technical and non-technical areas of common interest and are conducted by competent personnel from the industry. The practice of guest lectures is gainfully utilized to educate students on the new areas of studies not specified in the existing curriculum.

13.4 Industrial Visits

Large number of industrial visits are organized by the respective departments for students during their first two years at the institute with the intension of exposing them to the practical aspects of the theory taught in the classroom.

13.5 Link with the Academic and Professional Institutions

Several overseas Universities continue to engage in discussions and make presentations with regard to opportunities for NDT students persuading accredited degree programmes after completion of the course of study. The Institute also maintains liaison with the local branch of the City and Guilds of London Institute which conducts examinations on behalf of the Engineering Council (UK). The Engineering Council (UK) examinations facilitate NDT students to obtain academic standard requirements for Chartered Engineer qualifications.

A strong relationship is also maintained with the Institute of Incorporated Engineers Sri Lanka which is the sole professional body representing Engineering Diplomates and Incorporated Engineers in Sri Lanka. After the completion of the NDT programme Diplomates are eligible to apply for membership of this Institution and obtain Incorporated Engineer status after completion of necessary requirements.

14. Details of Recurrent Expenditure:

Subject	2010 Rs	2011 Rs
a. Personal emoluments	48,567,821	60,153,580
b. Travelling	67,096	42,250
c. Supplies	3,180,940	26,028,68
d. Maintenance	451,466	401,086
e. Contractual Service	51,049,40	4,305,925
f. Other	4,226,144	4,407,148
Total	56,493,467	96,309,989

15. Details of Capital Expenditure:

Subject	2010 Rs	2011 Rs
a. Acquisition of furniture & Office Equipments	3,844,087	4,058,720
b. Acquisition of Machineries	102,455	-
c. Acquisition of Building & Structures	1217,127	120,098
d. Other (Books & Periodicals)	508,824	82,250
Total	5,672,493	4,261,068

16. Details of Projects (Local/ Foreign Funded): Not Applicable

Name & Detail	Loan/Grant	Funding Agency	TCE Rs.	RFA Rs.	DF Rs.
Total					

#(GOSL/ADB/IDA/WB/.....)

17. Details of Project Expenditure (Local/Foreign Funded)

Name	TCE Rs.	Exp in 2010 Rs	Exp in 2011 Rs.	Cumulative Exp as at 31.12.2011	% of Physical Progress
Total					

18. Details of Financial Progress (Expenditure): Not Applicable

Subject	Provision in 2011 Rs	Exp in 2011 Rs	Savings/Excess Rs
a. Recurrent except Project			
b. Capital except Project			
c. Project – Local Fund			
d. Project – Foreign Funded			
Total			

19. Details of Financial Progress (Generated Income): Not Applicable

Source of Revenue	Provision in 2011 Rs	Collection in 2011 Rs	Deficit/ Surplus Rs
a. Undergraduate Studies			
b. Postgraduate Studies			
c. Consultancies			
d. Other			
Total			

20. Financial Performance Analysis - 2011:

Subject	Formula	Exp. Per Student Rs.
a. Recurrent Expenditure per Student (RE)	RE/No of Student Strength	
b. Capital Expenditure per Student (CE)	CE/No of Student Strength	
Total		

21. Details of Infrastructure Facilities Received in 2011: Not Applicable

Infrastructure Details	Expenditure Rs	Physical Progress

Internal Audit

Following are the duties carried out by the Internal Audit Division of University of Moratuwa with regard to the activities of the Institute of Technology, University of Moratuwa.

1. Pre-auditing of 28 nos. of Provident Fund refundings, 4 nos. of Gratuity payments and 4 nos. of Pension Payments.
2. Special Investigation on the petition about the corruptions of ITUM.
3. Maintenance of Advance /Loan Registers.
4. Special Investigation on appointment of a Senior Lecturer to the Division of Interdisciplinary Studies.
5. Control of Miscellaneous Advances.
6. Procurement of consumers and capital Goods.

There is no separate Internal Audit staff for the Institute. The above work was handled by a Computer Application Assistant, outsourced by the Institute.



Director,
Institute of Technology
University of Moratuwa

Report of Auditor General on the financial statements of the Institute of Technology, University of Moratuwa, for the year ended 31 December 2011 in terms of section 108 of the universities act no 16 of 1978.

The audit of the financial statements of the Institute of Technology University of Moratuwa for the year ended 31 December 2011, which includes a summary of revenue statement, change of ownership statement, cash flow statements, important accounting principles and other explanatory notes for the year so ended, was carried out under my direction in pursuance of provisions in article 154 (1) of the constitution of the democratic socialist republic of Sri Lanka read in conjunction with section 20 of the Institute of Technology of the University of Moratuwa ordinance no 3 of 2000 enacted under section 18 of the universities act no. 16 of 1978. My comments and observations which I consider should be published with the annual report of the institute appear in this report. A detailed report in terms of section 108(2) and sub-section III of the universities act was submitted to the Director of the institute on 13 July 2012.

1.2 Responsibility of the management for the financial statements.

The internal control necessary for the preparation of these financial statements in accordance with Sri Lankan Accounting Standards, fair presentation devoid of quantitative incorrect statements due to fraud or error, as deducted by the management is the responsibility of the management.

1.3 The responsibility of the auditor

It is my responsibility to express an opinion on these financial statements based on my audit. My audit was conducted in accordance with Sri Lanka Accounting Standards. These standards anticipate that I observe codes of conduct and that the financial statements are devoid of quantitative incorrect statements and reasonable confirmation obtained and that the audit was planned and executed.

The audit includes the procedures adopted in the examination of evidence supporting the amounts and disclosures in financial statements. Selected procedures also include the risky assessment of would be quantitative incorrect statements of due to fraud or mistakes are based on Auditor's decision. Although the auditor takes into consideration the internal control relevant to the preparation and fair presentation of financial statements he does not intend expressing an opinion on the productivity of university internal audit. The reasonability of the accounting principles observed by the management and also assessment of reasonability of the financial estimates and the assessment of the overall presentation are included in the audit. Sub sections (3) and (4) of section 13 of the finance Act no. 38 of 1971 give discretionary powers to the Auditor General to determine the scope and the extent of Audit.

In order to provide a basis for my qualified audit opinion, the audit evidence obtained, I believe is sufficient and appropriate.

1.4 Basis for qualified audit opinion

My opinion is a qualified opinion based on matters indicated in paragraph 2.2 of this report.

2 Financial Statements

2.1 Qualified Opinion

Except for the effects on the financial statements of the matters referred to in paragraph 3.2 of this report, I am of opinion that the financial status and financial activities and cash flows are in accordance with Sri Lanka Accounting standards and give a true and fair view of the financial activities of the Institute of Technology, University of Moratuwa as at 31st December 2011.

2.2 Comments on Financial Statements

2.2.1 Sri Lanka Accounting Standards

Sri Lanka Accounting Standard 24

What should be depicted in the financial statements as amortization relevant to government donations, is the amortization in respect of the assets received as government donations, but the bus received as a donation was also reflected as amortization in the financial statements. Accordingly Rs. 795,000/- had been shown in excess; as amortization, in the year under review.

2.2.2 Accounting deficiencies

Following Deficiencies were observed.

- (a) Interest on investment of Rs. 93,621 received in respect of 4 fixed deposits has not been accounted for in the accounts.
- (b) Although the interest receivable as at 31.12.2011 on 5 fixed deposits was Rs. 316,178, the amount shown in the accounts was Rs. 255,689. Thus the value of interest receivable and other funds account has been shown less by Rs. 60,489
- (c) Pre-payments amounting to Rs. 65,845 at the end of the year under review had been shown in the accounts as expenditure of the year under review, without making adjustments in the accounts.
- (d) Accrued Expenditure
 - (i) Although the postal expenditure for the month of November and December 2011 was Rs. 10,785 but Rs.5000 had been accounted for as accrued expenditure. Thus there is an excess of postal and accrued expenditure in a sum of Rs. 39,215.
 - (ii) Security service, expenses further month of December 2011, in a sum of Rs. 94,605 had not been accounted for under accrued expenses. Thus, the accrued expenses and the security services expenditure was shown less by the amount.
 - (iii) Although Rs. 710,150 had been paid as salaries and wages for the month of December 2011 Rs. 910,150 had been accounted for as accrued expenditure. Hence Rs. 200,000 had been shown in excess for salaries and wages and accrued expenditure.

2.2.3 Accounts Receivable and payable.

Following deficiencies were observed.

(a) Accounting Receivable

- (i) The University of Moratuwa had received a sum of Rs. 159,273 from the security service firm, with regard to the computers belonging to the Institute of Technology that had been lost in 2006, but action had not been taken to obtain this money to the institute.
- (ii) Distress loan balance of Rs. 56,780 and staff loan balance of Rs. 4080 which would have been recovered in 2004 had not been covered so far.

(b) Accounting Payable

- (i) Action had not been taken to settle value added tax, amounting to Rs. 43,239 payable to the Inland Revenue Department since 2007.
- (ii) Cash in hand in a sum of Rs. 286,462 payable to three institutes had been shown in the accounts without being settled from the year 2009 to 31st December 2011.

2.2.4 Lack of evidence in Audit

The detailed schedules to confirm the following values shown in the financial statements, had not been rendered in audit.

Item	Value (Rs.)
Deferred Mahapola Scholarship	425,900
Deferred Bursaries	2,062,250
	2,488,150

2.2.5 Non Compliance with laws, rules, regulations and management decisions

(a) Establishment code for Higher Education and University

- | Grant Commission | Non -Compliance |
|---|---|
| (1) Sub section 33(b) section II of chapter X and UGC Circular No. 920 dated 05.02.2010 | Although it is mandatory that all agreements and bonds should be signed prior to the commencement of study leave, it was observed that three probationary lecturers have signed their bonds and agreements after taking |

- their study leave.
- (ii) Section 6.3 of UGC Circular No. 856 dated 31st January 2005 Although a committee had to be appointed regarding payment of Mahapola and Bursaries No such action has been taken.

(b) Financial Regulations

- (1) Financial regulation 756 and Government Finance Department circular No.PED/RED/03/03 of 21 October 2011 A board of survey of all inventory items had to be carried out for the year 2011. But this survey had not been conducted even up to 26.06.2012
- (ii) Financial Regulations 571 Laboratory and Library deposits amounting to Rs. 1,135,150 received from students who have completed their studies and a four year period also had lapsed and tender deposits of Rs. 42,250 for more than 2 years, had not been settled.

2.2.6 Transaction not covered with adequate authority

When paying contributions to the university provident fund and Employees Trust Fund the Director General of Budget, Government Budget Department by his letter No. BD/INS?CIUS-A/078 dated 18.07.2003, had informed that the academic allowance should not be considered. However, when making such contributions, the amount of contributions has been computed taking into consideration the academic allowances. In view of this excess contributions had been made to the UPF and UPF in a sum of Rs. 139,065 and ETF Rs. 27813.

3. Financial Review

3.1 Financial Results

According to Financial statements presented the Financial results of the operation of the Institute during the year under review was a deficit of Rs.75,552,577 before taking into account the government grant for recurrent expenditure and the amortization and the corresponding deficit for the proceeding year was Rs.64,898,702 this deficit had been an excess of Rs.4,834,423 due to the government grant of Rs. 74,732,645 for the recurrent expenditure and amortization of Rs.5,654,355 for the year under review. The deficit for the proceeding year had reduced to Rs.758,472 due to government grant of Rs.58,956,000 for the recurrent expenditure and the amortization of Rs.5,184,230 for that year.

3.2 Management of working capital

An average of not less than Rs.30,000,000 per month during the year 2011 had been kept in three current accounts but not considered to invest and earn income.

4 Operational Review

4.1 Performance

(a) Academic Activities

	2007	2008	2009	2010	2011
Total number of students	982	974	987	987	1016
Recruitments	351	369	360	360	358
Students who were away from the institute for practical training in the final year	300	298	295	310	329
Total number of students who had their education in the institute	682	676	692	677	687
Diplomats	289	303	336	299	296
committed expenditure for the year	72,631,209	74,310,447	78,644,210	83,482,537	90,462,255
Per student cost	106,497	109,927	113,648	123,312	137,481
Mahapola students		209	206	204	208
Bursary students		469	451	494	499

Following observation are made

- (i) 09 diploma courses are conducted by the institute and out of the 351 students enrolled in 2007 , 296 students completed the diploma and this amount represents 84%
- (ii) within the years 2009, 2010 and 2012 students numbering 360, 360 and 358 respectively in a total of 1078 were admitted to the institute as would be diplomates, but the number remained in the institute by 2011 was 1016.
- (iii) The number of students enrolled in 2000, the year in which the institute commenced was 350 and the number of students enrolled in 2011 was 350. Hence after a large of 11 years the rate of increase in the number of students was only 2%.
- (iv) Unexpended capital grants

Details of capital grants received and expended during the year 2011 are shown here under.

	Balance as at 01.01.2011	Grants Received	Total Grants	Expenditure from grants	Percentage of expenditure from expenditure	Balance as at 31.12.2011
	Rs.	Rs.	Rs.	Rs.		Rs.
Buildings	803,474	-	803,474	120,098	15%	683,376
Machinery	60,740	-	60,740	-	0%	60,740
Laboratory and teaching equipment	5,066,719	4,300,000	9,366,719	2,868,720	31%	6,497,999
Books and periodicals	508,542	500,000	1,008,542	82,250	8%	926,292
Diyagama Construction Project						
Land Building and wall	27,170,256	-	27,170,256	8,261,735	30%	18,908,521
	33,609,731	4,800,000	38,409,731	11,332,803		18,908,521

Following observations are made

- (a) The balance as at 1 January 2011 in the unexpended capital grant was Rs.33,609,731 and the amount spent during the year was Rs.11,332,803. Accordingly it is observed that a lesser amount than the opening balance had been spent during the year under review.
- (b) When taken as a percentage of the total unexpended capital grant at the beginning of the year and the capital grants received for the year 85% of the government grant for buildings 100% of the government grant for machinery 69% of the government grant for laboratory and teaching equipment , 92% of the government grant for Diyagama project had remained unexpended as at the end of the year under reviews.

4.2 operational inefficiencies

Although the polymer science short term course which was started in July 2010, was to be completed in 10 months time, it has taken 23 months to complete the course.

5. Accountability and good governance

5.1 Master plan

Following deficiencies were observed.

- (a) According to chapter 5.1.3 of public enterprises circular No. PED/12 dated 02 June 2003, the master plan should be approved by the board of management, but for the master plan prepared for the period 2011-2015 approval of the board of management had not been obtained.
- (b) In term of chapter 5.1.3 of public administration circular No.PED/12 OF 02 June 2003 financial records, data, strengths, weaknesses, opportunities and threats relevant to the ensuing three years, which should be included in the master plan (SWOT Analysis) had not been identified and included.

5.2 Activity Plan

Activity plan had not been prepared for the year under review in terms of chapter 5.1 of public enterprises circular No PED/12 of June 2003.

5.3 Audit and Management Committee

Audit and Management Committee meeting were not held during the year 2011

5.4 Replies to audit queries

A long delay was observed in replying audit queries. Replies to six queries out of nine issued in the previous year and six out of sixteen issued during the year under review had not been replied to date.

5.5 Budgetary Control

It has been observed that the budget had not been used as a management tool as there is a substantial fluctuation between the estimated income and expenditure and the actual income and expenditure.

5.6 Tabling of Annual Reports

In terms of paragraph 6.5.3 of public enterprises circular No. PED/12 of 02.06.2003 the annual reports for the years 2009 and 2010 had not been tabled in parliament until 30th June 2012.

6 System and Controls

Deficiencies in systems and controls observed during the course of audit were informed to the Director of the Institute from the following areas of control.

- (a) Board of Survey
- (b) Budgetary Control
- (c) Subsidiary records
- (d) Advances
- (e) Financial control
- (f) Recoveries
- (g) Writing of accounting books, registers and records
- (h) Journal Entires
- (i) Maintenance of ledgers

Sgd / H.A.S Samarweera
Auditor General

Auditor General
Auditor General's Department
No.306/72, Polduwa Rd,
Battaramulla

Report of the Auditor General on the Financial Statements of the Institute of Technology of the University of Moratuwa, for the year ended 31 December 2011, in terms of section 108(2) of the universities' Act No. 16 of 1978 and section 13(7)(a) of the finance Act No. 18 of 1971

2.2.1 Sri Lanka Accounting Standards

- (a) Necessary adjustments will be made in the year 2012 on depreciation made with regard to the bus received as a donation.
- (b) Adjustment will be made to account for the value of the car recoded at cost for Rs. 4,200,000
- (c) The corresponding amount of the work in progress Rs. 30,106,904.00 has been shown in the final accounts. Hence, the lands and work-in-progress has not been shown separately but shown as on unit cost.

2.2.2 Accounting Deficiencies

- (a) Interest receivable on fixed deposits had been computed and shown in the accounts with regard to the differences adjustments will be made through journal entries.
- (b) When computing interest on fixed deposits, fixed deposit No. 0003417457 for Rs. 154808.50 had been deposited only for a year. Since the annual interest rates change, the interest on this deposit is computed as follows ie. $154,808.50 \times 8 / 100 \times 333 / 365 = 11298.89$. But you have received Rs. 14,190.77 on an interest rate of 10%. The number of days for the period from 02.02.2011 to 31.12.2011 is 333. It is informed that the correct interest had been computed relevant to the number of dates.

If there is a mistake in computing the interest on other fixed deposits it has been noted to make correct computations in the ensuing year.

- (c) Monies received from the Mahapola Scholarship fund for students had been carried forward for payment to the students who are following the marking engineering course and who are out of the island. Accordingly after making the relevant payments. The balance will be returned to the Mahapola Scholarship fund. Relevant adjustments will also be made through the differed Mahapola Scholarship account.

As a credit balance in the relevant account is shown as deferred and that such balance is also shown as a liability, it is not shown as a separate creditor.

(d) With regard to the pre-payments, where adjustments have not been made on certain expenditure, relevant adjustments will be made in the ensuing year.

(e) Accrued Expenditure

I. The estimated expenditure was, to a certain extent not exact and the actual expenses have been expended. This has been noted to be adjusted in the ensuing year under new accounting standards.

II. To make the necessary adjustments with regard to accrued expenses earmarked for security expenses. Actual expenditure incurred had to be obtained from the main university. But as the details of payments to the private organization L.R.D.C services(Pvt)Ltd. Could not be obtained properly, such expenses could not be shown as accrued expenses.

III. Accurate estimates could not be obtained with regard to salaries up to the time the final accounts are prepared. Action will be taken in future to show the accruals accurately.

(f) Action will be taken in due course to correct the changes in the presentation of these accounts.

(g) The construction work of the buildings in the land at Diyagama premises owned by the Institute of Technology has not commenced as yet. Provision for depreciation for walls and gates, will be made in the ensuing year.

2.2.3 Unreconciled Accounts

(a) Non- Reconciliation of the distress loan balance as at 31.12.2011 with the relevant schedules is being noted to be reconciled during the year 2012.

(b) Non- Reconciliation of the staff loan balance as at 31.12.2011 with the relevant schedules, is being noted to be reconciled during the year 2012.

(c) Over recovery of festival advance has been sorted out and corrected by now.

2.2.4 Difference not made clear

(a) A sum total of Rs. 283,482 comprising of Rs. 77482/- other recurrent expenditure payable in 2011 and Rs. 206,000/- as audit fees has been provided as accrued expenditure.

(b) Although there were correct figures in the spent capital grant account, it was revealed that there is a difference in the general ledger and financial statements in view of the methodology used in presenting accounts. This will be corrected in due course.

2.2.5 Accounts Receivable

(a) Accounts Receivable

- I. Reminders have been sent to obtain Rs.159,273.00 which the University of Moratuwa had recovered from the security service organization for the computers lost in the year 2006, which was the property of the Institute of Technology. Noted to send a further reminder to obtain the said sum of the money.
- II. Distress loan balance of Rs. 56,780.00 and staff loan of Rs. 4080.00 recoverable from the year 2004 will be recovered when releasing the provident fund of such officers. Action had been delayed as the officers concerned have gone abroad.

(b) Account Payable

- I. The balance will be returned after making payments from monies retained from funds received from the Mahapola Scholarship fund for payment of Mahapola Scholarships to Marine Engineering students who have left the island. These Marine Engineering students disembark only at a certain period of time and until then scholarship monies are retained.
- II. The value added tax payable to the inland revenue department had been paid and settled already.
- III. Monies retained, when purchasing computers from Softlogic (Pvt)Ltd are also within this amount. Retention was made until quality reports are obtained from Heads of Departments who use these computers. However by now the quality reports have been obtained and retained amount also had been paid.

2.2.6 Lack of evidence in audit

The register of laboratory and library deposits has been given annually from the administration section of the Institute of Technology for auditing. Documents relating to differed Mahapola Scholarships and differed bursaries had been forwarded to audit.

Mahapola Grant receivable will be adjusted with the Mahapola Account in the ensuing year.

2.2.7 Non-Compliance with Laws, Rules, Regulations and Management Decisions

(a)

- I. Bonds and Agreements have been signed prior to the commencement of study leave.
- II. Taking into consideration the effectiveness of the administration of the Institute of Technology, with regard to the payment of Mahapola and bursaries, action had been taken in accordance with the relevant circular.

(b) Financial Regulations

- I. Boards of Survey Committee had been appointed. This aspect is being delayed due to unavoidable circumstances. Special attention will be made in this connection.
- II. No payments would be made to students from laboratory and library deposits, but with regard to tender deposits, such deposits would be released, if a request is received in future. If no such request is received deposits will be credited to revenue in the ensuing year.

2.2.8 Transactions not covered with adequate authority

- (a) The academic allowance had not been taken into consideration, when making contribution to the University Provident Fund and Employees Trust Fund. Computation of the Provident Fund contributions and Employees Trust Fund contributions, has been correctly done. The correctness of such computational schedules could be confirmed from the data of the salaries division.
- (b) Considering the student numbers of the Institute of Technology and the mandatory work to be performed, it has become necessary to get all such work done by the limited number of staff members attached to the institute. Hence, payments were made from government funds for a day, per month for performing office work during the week-end. If in the same month, an additional day of work was done, payment had been made from a different fund other than from government funds, depending on the nature of work done. These service are needed, at times, to provide data required, now and again, by the University Grants Commission, Higher Educational Institute and Parliament and hence officers limited to three are detailed to do work, other than on normal working days and this has been done with exigencies of services of the Institute and with the approval of the Heads of the institute. There is no other course of action that could be adopted, in such circumstances, to perform the work of the Institute methodically. In this connection the approval of the Board of Management also has been obtained.

3.2 Management of working capital

To bank current accounts are maintained under account nos. 308280 and 072483304. A separate account for capital funds No. 072483304 was opened in mid 2011 and both recurrent and capital funds which were in one account was separately maintained in two bank accounts. The capital account bank balance includes a sum closer to Rs. 20 million from funds received for phase 1 of the Diyagama Project. Diyagama project is a large scale capital building construction project where preliminary work of phase 1 of the project was to commence, funds were retained speculating when such capital funds would be required as plans were prepared for an urgent building project with Chinese Government (CATIC organization) and relevant contract agreement also has been signed. It was for this reason that these funds were not returned to the treasury.

This has been informed in writing to the treasury and the University Grants Commission seeking their approval for the above reasons this amount has been retained in the bank. Since there is no legal provision to invest government funds no such investment was made.

(a) Operational Review

III. With the limited facilities at the Moratuwa University, enrolment of students had to be limited to 350. Under the proposed large scale project of re-locating and development of the Institute of Technology at Diyagama premises, it is intended to enroll 1000 students.

(b) Unexpended capital grants

(a) Utilizing the unexpected capital grants in 2012, equipments will be purchased, as needed by the respective academic departments.

(b) Within the unexpended capital grant, grants received for the implementation of the above mentioned Diyagama project are also shown from Rs. 4,800,000.00 received during the year under review Rs. 3,545,970.00 was spent for capital items. Accordingly Rs. 1,254,030.00 is left from the grant received 73% of the capital grants received during the year under review had been spent. Funds received for the Diyagama project was not the monies received in 2011, but was the Diyagama construction fund which was specially meant for the Diyagama project. This project is maintained with expectations of it being implemented.

(c) About 70% of the capital receipt have been spent, as was necessary during the year under review.

4.3 Under utilization of funds

Those funds which were relevant to the Marine Engineering Division, have been deposited in a fixed deposit account. From the interest received, expenditure relevant to the Marine Engineering Division is committed. These funds are being used and therefore there is no under utilization.

5.1 Accountability and good governance

- (a) Master plan for 2011-2015 had been prepared and had received the approval of the Board of Management.
- (b) Although there was the uncertainty of the implanting process of Relocating and Development of the Institute of Technology and also the problems in planning process, the annual draft budget was presented.

5.2 Activity Plan

Activity plan for the year under review was prepared and forwarded for approval.

5.3 Audit and Management Committee

Audit and Management Committee had conducted meetings during the year 2011.

5.4 Replies to Audit Quarries

Replies to Audit Quarries had been prepared and forwarded. Action will be taken to send replies to the remaining audit quarries. In all instances clarifications were given verbally and this has been done continuously.

5.5 Procurement Plan

Work had been done accordingly to a procurement plan in 2011.

5.6 Budgetary Control

Although the draft estimates were prepared on the basis of necessary pre discussions and in accordance with U.G.C Finance Circular Letter No. 04/2010 of 19.08.2010. Estimates have to be prepared again after the grant for the Institute is determined by the U.G.C. An income and expenditure statement is presented in each month and this document is reviewed at length by the Board of Management. This does not seem to be happening in other institutes.

5.7 Tabling the annual report

Annual Reports for the years 2009 and 2010 have been prepared and forwarded to the U.G.C to be tabled in parliament.

6. Systems and Controls

- (a) Survey of assets was conducted.
- (b) Budgetary controls were effectively made.
- (c) Supporting schedules have been forwarded to audit
- (d) Advances have been settled in time
- (e) Financial controls of the institute were properly effected.
- (f) Loan recoveries were done properly. Recovery of loans from officers who have left the island will be made when releasing their provident fund.
- (g) Books, records and reports are maintains in an orderly manner.
- (h) Journal entries have been correctly made.
- (i) Entries were recorded in the ledger and presented in audit.

**Sgd/ Dr. T.A.G. Gunasekara,
Director
Institute of Technology,
University of Moratuwa.**