SUBJECT REVIEW REPORT

DEPARTMENT OF MECHANICAL & MANUFACTURING ENGINEERING

FACULTY OF ENGINEERING
UNIVERSITY OF RUHUNA

08th to 10th January 2007

Review Team :
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1. SUBJECT REVIEW PROCESS

Subject review process of the UGC involves evaluating the quality of education within a specific subject or discipline, focusing on the student learning experience and on student achievement related to both undergraduate and taught postgraduate programs. It is understood that the final responsibility for quality and standards remains within the institution itself, since it alone has the powers to control and to change existing practices.

Subject review process at the Department of Mechanical and Manufacturing Engineering (DMME) of the University of Ruhuna was conducted following the guidelines provided in the Quality Assurance Handbook for Sri Lankan Universities, published by the CVCD and University Grants Commission in July 2002. The quality of education was reviewed at the Departmental level according to the aims and learning outcomes listed below as given in the Self Evaluation Report (SER):

1. Curriculum design, content and review,
2. Teaching, learning and assessment methods,
3. Quality of students including student progress and achievements,
4. Extent and use of student feedback (both qualitative and quantitative),
5. Postgraduate studies,
6. Peer observation,
7. Skills development, and
8. Academic guidance and counselling.

The Review Team visited the DMME for three days, namely 8th, 9th and 10th of January 2007. The itinerary of the three-day visit is given in Annex 1. The information related to the eight aspects highlighted above were collected through discussions with the Dean, Head of the Department, members of the academic and non-academic staff, a group of undergraduate students (see Annex 2 for persons met during the visit), and by peer observation of the teaching process (see Annex 3), by observing the facilities available at the DMME and the Faculty (see Annex 4) and by examining the documents provided by the DMME (see Annex 5).

Each of the eight aspects was judged as good/satisfactory/unsatisfactory, noting the strengths, good practices and weaknesses in each. Considering the judgment of the eight aspects, an overall evaluation is reported at the end of this report out of the three judgments confidence/limited confidence/no confidence in the academic program.

2. BRIEF HISTORY OF THE UNIVERSITY, FACULTY AND THE DEPARTMENT

The Faculty of Engineering of University of Ruhuna was established on 1st of July 1999 at Hapugala, Galle, as the third conventional Engineering Faculty in Sri Lanka. The DMME is one of the four departments established at the inception of the Faculty of Engineering.

The vision of the DMME is to be an innovative leader in undergraduate and graduate education, high quality research and expert technical services essential for sustainable social, economic and technological development of the society.

The mission of the DMME is to provide an academic environment that delivers a sound understanding of the fundamental theory, an excellent grounding in practical skills, the opportunity to develop the ability of creative design, as exposure to modern technology,

an awareness of environmental and social constraints, basic skills in management and entrepreneurship, and an encouragement for high quality research.

Current annual intake of the Faculty is 200 students and they follow a common course during the first two semesters of study. From third semester onwards students specialize in Mechanical and Manufacturing Engineering and the current intake to the department is around 70. As a newly established department, the DMME has not yet started any post-graduate program, neither by course nor by research, although the intentions have been made known in the SER to start a taught Master's program in the area of Energy Management.

At present (January 2007), there are 14 academic cadre positions in DMME, out of which only 10 positions are filled. Two positions exist for technical officers, one for computer application assistant and four for lab attendants/labourers.

A separate Faculty library is available for the use of the students both for borrowing and reference and books can also be borrowed from the main University library in Matara.

3. AIMS AND LEARNING OUTCOMES

3.1. Aims

The aim of the department (according to SER) is to provide an academic environment that delivers a sound understanding of the fundamental theory, an excellent grounding in practical skills, the opportunity to develop the ability of creative design, an exposure to modern technology, an awareness of environmental and social constraints, basic skills in management and entrepreneurship, and an encouragement for high quality research.

3.2. Learning Outcomes

On successful completion of the program of study leading to the award of the degree of Bachelor of Science of Engineering (Honours) in the field of Mechanical and Manufacturing Engineering, students should gain (as given in SER):

- *A sound theoretical knowledge in Mechanical and Manufacturing Engineering.* Specifically the basic mathematical and scientific knowledge necessary for Materials and Manufacturing Engineering, Thermal and Fluid Engineering, and Applied Mechanics, Control and Automation.
- *Discipline specific practical skills.* Particularly those related to laboratory work such as the operation of testing equipment, tools and machinery, and the practice of appropriate safety measures.
- *Creative and Innovative design abilities.* The ability to creatively use proper Engineering design methods paying special attention to standard practices, constraints and modern techniques.
- *The ability of experimentation and verification.* Especially the necessary skills and the need to device and carry out experiments to verify their Engineering solutions. Additional skills such as observation, enquiry, critical thinking, data analysis, and experience in operating scientific equipment are also expected outcomes.

- *An exposure to up to date modern Engineering technology of the world.* The student is expected to seek out new ideas and explore possibilities of successful adaptation.
- *A clear comprehension of the present level of technological development of the country.* Paying special attention to both the available resources and limitations of the country.
- *An awareness of the impact of Engineering on the society and environment.* Specifically the ability to provide Engineering solutions that minimize undesirable social and environmental consequences. They should also be able to find innovative solutions to existing social and environmental problems.
- *The ability to lead and work with a group of individuals towards the achievement of a common goal.* In order to be able to successfully work in a group the student should have developed the ability of clear observation, critical analysis, evaluation, communication, compromise, and dedication.
- *The basic skills of entrepreneurship.* The student should have the basic ability to help one's fellow citizens and reach out, creating employment for others, as well as for oneself.
- *Technical communication skills.* Proficiency in modern ICT skills, specifically the ability to communicate with clarity and precision within and outside the profession.
- *The ability of continuing personal and professional development.* The interest and ability to stay abreast of the latest developments of the field through reference to scientific material. The student should develop the ability of locating and referring to scientific material in journals, magazines, and the World Wide Web.

4. FINDINGS OF THE REVIEW TEAM

The Review Team findings are given in the following sub sections under the headings 4.1 through 4.8.

- Curriculum design, content and review
- Teaching, learning and assessment methods
- Quality of students including student progress and achievement
- Extent and use of student feedback
- Postgraduate studies
- Peer observation
- Skills development, and
- Academic guidance and counselling.

4.1. Curriculum Design, Content and Review

From its inception in 1999, the Faculty curriculum had been shaped under the guidance of senior academics in the university system. The curriculum thus introduced persisted until a new curriculum was introduced in 2006.

Both these curricula had been styled in conformity with the existing practices at the Faculties of Engineering at Moratuwa and Peradeniya. Curriculum revision process adopted

by the Faculty was reported to entail obtaining feedback from its graduates, practicing engineers in the industry and entrepreneurs, culminating in a workshop where final shaping of the curriculum had taken place.

Engineering presentation (IS1202) and Engineering Mechanics (IS2305) administered by the Department of Interdisciplinary Studies have been assigned to the Department of MME under new titles "Engineering Drawing (ME1202)" and "Engineering Mechanics (ME2204)" respectively. This is a move in the right direction. However, the Review Team observes that at present two curricula, both old and new, are being offered until the students following the old curriculum have completed the Course.

The existence of a Department of Interdisciplinary Studies enhances opportunities available to the students to widen their outlook by acquiring knowledge and skills in non-technical subjects.

The Regulations of the Faculty amended during the latter part of 2006 in respect of the new curriculum and applicable to the intake of students from the academic year 2006/07, stipulate that the students who have been assigned a conditional pass in a module shall be required to repeat the module or be successful at a supplementary evaluation. The considered opinion of the Review Team is that the imposition of the requirement to repeat a module (both continuous assessment and the final evaluation) is unfair and deserves reconsideration. A student who has been successful in continuous assessment but failed the end of semester examination may be permitted to retain such eligibility in continuous assessment for a limited period of time to be determined by the Faculty without having to repeat the module.

The Faculty has been able to have its curriculum accredited by the Institution of Engineers Sri Lanka (IESL), thus enabling its graduands to obtain associate membership of the IESL.

Documentation made available to the Review Team during the evaluation displayed not only the outline syllabi of all modules but details such as the coverage of content, laboratory work and tutorials, as applicable, together with the time allocation for each topic.

The Review Team is of the view that the coverage of depth and breadth of the various modules in the curriculum would positively contribute to the formation of an engineering graduate eminently suited to meet the needs of the country.

The Review Team further notes, that the in-course assessment procedures are reviewed regularly and appropriate changes implemented by the Department as and when required.

The foregoing facts confirm that the Department has ventured into adhering to vibrant approaches in Curriculum Design, Content and Review.

In relation to the Curriculum Design, Content and Review, the judgment of the Review Team is GOOD.

4.2. Teaching, Learning and Assessment Methods

Workload of the student over a period of 8 Semesters is observed to be distributed uniformly (18 credits per semester) without overloading any particular semester. Teaching and learning is facilitated through a combination of lectures, laboratory work, tutorials, project work, guest lectures, field visits and industrial training.

The method of evaluation adopted by the Department comprises continuous assessment through laboratory work in selected modules, tutorials and assignments and culminating in the end of semester examination. Evidence was produced to the Review Team that the end of examination question papers in almost all the modules had been moderated by senior academics drawn from the Faculties of Engineering in the University system. We consider this to be a healthy practice which contributes to the enhancement of credibility of the standard the Department is striving to maintain.

The commitment and dedication of the staff are evidenced by the fact that the results of the end of the semester examination are released within three weeks.

The Review Team observed a lack of supervision and participation of senior academics including module coordinators in conducting laboratory work. In addition, the laboratory reports submitted by the students at the conclusion of a laboratory session are scrutinized only by a temporary staff member (Instructor), in contrast to the well established practices observed elsewhere. Further, no mark was found to be indicated on the report itself. These are matters of concern for the Review Team and need to be addressed by the DMME.

Although a computer laboratory with adequate number of machines is available for use by the students for long hours (till 2300 hrs), upgrading of the system hardware installed is imperative. The speed of access to the Internet was observed to be woefully inadequate due to narrow bandwidth of the connection (although other reasons may also contribute this situation) requiring immediate attention.

The Faculty has a library with about 11,000 volumes and 26 journals to serve the academic community. It provides books to students on loan for a period up to two weeks and for overnight reference. There exist other standard practices available in similar libraries for accessing wider resources. Differences of opinion between the library staff and the students surfaced regarding the availability of multiple copies of recommended textbooks.

Good practices adopted in other established faculties in respect of undergraduate projects and industrial training are in place in this Department too. Both the staff and students emphasized the usefulness of student presentations in the course of project work. It was reported that this enhances their communication skills. This contributes significantly to the moulding of a well-rounded engineer.

The lead given to the youthful and energetic staff, in the Faculty in general and the DMME in particular, by the experienced academics, who founded the Faculty, has placed them in an advantageous position. It is also encouraging to observe that they display continuing commitment, enthusiasm and a spirit of teamwork prevalent in the Faculty that has been confirmed particularly by a wide cross section of students that the Review Team was able to interact with.

It is a matter for concern that the Department is severely handicapped due to an acute shortage of senior academic staff. It was reported that two members of the academic staff, who were present at the time of preparation of the SER in October 2006 have left and the Department has not been able to find replacements. This requires immediate attention of the higher authorities, especially in a situation where the Faculty has doubled its intake of students. Although attracting visiting academic staff to engage in teaching the faculty, the excessive dependence on their services cannot be accepted as a solution. Indications are that the prevailing situation is likely to deteriorate further.

The Review Team notes with satisfaction the use of modern technologies in the delivery of modules. This practice contributes to the quality of teaching and learning.

The practice of 5-S was observed in all six laboratories under the purview of the DMME. The cleanliness and orderliness of lecture rooms, seminar room, drawing office, computer centre and the library deserve special mention.

In spite of the few drawbacks identified by the Review Team, it is of the view that the teaching, learning and assessment currently in place are adequate to achieve the objectives that the Department had set for itself.

The Review Team rates this aspect as GOOD.

4.3. Quality of Students, including Student Progress and Achievements

The intake to the Department for specialization in MME is based on both the preference and the performance during the first two semesters that are common to all students. However, it is noteworthy that the statistics provided by the department indicate that a significant number of high achievers tend to opt for specialization in MME.

Although, it is perceived that student gaining admission to the Faculty of Engineering of the University of Ruhuna is of lower academic achievement at the G.C.E (A-Level), the DMME has been successful in producing a quality engineer acceptable to the industry.

Attention was drawn that one of its undergraduate projects had received recognition at the Annual Sessions of the Institution of Engineers, Sri Lanka.

Out of the three batches of students numbering 88, all but one undergraduate have successfully completed the course. This can be considered as a creditable achievement of the Department.

Following the practices in other universities, the graduates with highest achievement have been absorbed to the academic staff as probationary lecturers while some others have been employed as temporary instructors.

It is observed that the batches of graduates have successfully completed their studies and have been gainfully employed. According to the SER, out of the 87 graduates produced by the Department, 2 have secured first classes while 17 have second class upper division passes. It was revealed during discussions with the staff that some of these graduates have been admitted to read for PhDs in reputed foreign universities.

The Review Team notes that the quality of students admitted to the Department has not been an impediment to producing a high quality engineer. In this context it is judged that the performance of the Department is commendable.

So, it is the view of the Review Team that the Quality of Students, Student Progress and Achievements of the Department can be judged as GOOD.

4.4. Extent and Use of Student Feedback, Qualitative and Quantitative

Evidence presented to the Review Team revealed the existence of three types of questionnaires administered to the students at the end of each semester, with a view to obtaining feedback on the evaluation of,

- teacher performance
- practical sessions, and
- field visits.

Information received from students is processed and available with the Head of Department.

Although the practice of compiling such information is commendable, the Review Team was not convinced that the information had been put to effective use. This weakens the process of improving teaching quality.

It is reported that student representatives on the Faculty Board make regular representations regarding contemporary issues of importance to the student community.

The Review Team observes that a concerted effort must be made to make use of the feedback information that has been so carefully collected and processed. It should continue to make use of this information to make qualitative and quantitative improvements in the teaching and learning.

It is the view of the Review Team that the Extent and Use of Student Feedback of the Department can be judged as SATISFACTORY.

4.5. Postgraduate Studies

There is no evidence of postgraduate study programmes being conducted by the Department although the intentions have been made known in the SER with an indication that a possible area is Energy Management. One factor that militates against the commencement of such programmes is the acute shortage of qualified senior staff.

At present, three probationary lecturers are undergoing postgraduate training, a requirement in their career development. Two such lecturers are attached to the Southern Methodist University in Dallas, Texas, USA, specializing in Dynamics and Control Systems (Robotics), and the other in the Design of Opto-electronic Materials Packaging. Yet another staff member is pursuing studies in Industrial Management and Operations Research at the Clemson University also in the USA. A fourth probationary lecturer is undertaking research in Non-destructive Inspection on Dynamics of Biological Objects using Optical Interference Techniques at Saitama University in Japan. During the discussions the Team had with both staff and the students, it was made amply clear that the Department currently lacks both human and physical resources for any future expansions.

With the return of the staff undergoing training abroad, the capacity to undertake research and launch postgraduate programmes is likely to improve.

There are positive indicators for better prospects in not so distant future provided the University makes a concerted effort to create an environment conducive for such activities.

The Review Team views the prevailing situation as one of where the Department by itself has no control, but the commitment with which they apply themselves is likely to succeed.

It is the view of the Review Team that the Postgraduate Studies of the Department can be judged as SATISFACTORY.

4.6. Peer Observation

There are no formal arrangements to conduct peer observations in the classroom. However, informal peer interactions take place in the Department meetings that are held regularly, where issues pertaining to teaching and learning are discussed. The Review Team

strongly recommends that the formal classroom peer observation and evaluation mechanisms are introduced.

It was evident from the interactions the review team had with the staff, non-familiarity of this practice, possibly due to the lack of senior academic staff. However, the Team noted with satisfaction that they were able to enthuse the members of the academic staff about the need to introduce the practice of peer observation.

It is the view of the Review Team that the present status of the Peer Observation adopted by the members of the staff is considered as SATISFACTORY.

4.7. Skills Development

Skills development process forms a part of the curriculum and it is evident from the initiatives undertaken through the recent curriculum revisions. The Department of Interdisciplinary studies continue to provide the services by teaching the communication skills in the formative stages and several other modules in non-engineering electives in the later semesters. These modules include personnel development, humanities and social sciences, economics and finance, and management and entrepreneurship.

The Department has made arrangements to support the development of practical communication skills in making presentations using information and communication technologies. A case in point is the presentations the students are required to make during the final year in relation to their projects.

The healthy habit of arranging eminent personalities to deliver guest lectures at regular intervals is viewed as a positive development.

The Review Team views the achievements of the Department on this regard successful and beneficial to the students.

In relation to the Skills Development, the judgment of the Review Team is GOOD.

4.8. Academic Guidance and Counselling

Well established and fully functional academic guidance and counselling system is in place. During the formative years (first phase - first two Semesters) each student is assigned an academic staff member from the Faculty, whilst an academic advisor from the Department is assigned to the student when they are pursuing their studies in the field of specialization (second phase – third to eighth Semester).

The advisers role during the first phase would be to facilitate smooth transition from widely varying socio economic and competitive environment in which they received their secondary education to one in which they are to embark on tertiary education in University environment, where they become self reliant and acquire maturity. They also provide general academic guidance and monitor the student discipline related behaviour while on campus.

Encouraged by the positive outcomes of academic counselling, the faculty has ventured into a new arrangement, where the role of the academic counsellor has been enlarged to that of a mentor.

The Review Team is highly impressed by the approach adopted by the Faculty in general, and the Department in particular, in developing an excellent staff student relationship resulting from the academic guidance and mentoring arrangements in place.

It is the view of the review team that the present situation with regard to Academic Guidance and Counselling adopted by the Department can be considered as GOOD.

5. CONCLUSIONS

Curriculum Design, Content and Review: During the relatively short period of seven years of its existence, the Faculty of Engineering, in general and the DMME in particular, has been able to review its existing curriculum and introduced a new curriculum taking into consideration the views of all stakeholders. The Review Team views with satisfaction the changes affected to the existing curriculum. Judgment: ***Good.***

Teaching, Learning and Assessment Methods: Amidst an acute shortage of academic staff in the Department, it was evident that teaching, learning and evaluation is carried out through a combination of lectures, tutorials, laboratory work and assignments, field visits as applicable. culminating in the end of semester examination. The work load of the students was observed to be evenly distributed over the 8 semesters. The Review Team recommends that the laboratory work is carried out under the supervision of academic staff, and not solely by the academic support staff. Judgment**:** ***Good.***

Quality of Students, including Student Progress and Achievements: The final results of the three batches who have completed the Degree program indicate that a success rate of almost 100%. Almost all of them have been gainfully employed while a few have been able to secure admission in reputed foreign universities for higher studies. Judgment**:** ***Good.***

Extent and Use of Student Feedback: The Review Team notes with satisfaction the collection of feedback information compiled by the Department on evaluation of Teacher performance, Practical sessions and Field visits. However, the review team is not convinced that this information is made use of effectively for qualitative and quantitative improvement in the teaching and learning. Judgment: ***Satisfactory.***

Postgraduate Studies: The Review Team was presented with evidence regarding plans to launch post graduate studies in Energy Management. However, in the absence of adequate senior staff, it is unlikely that the Department could show any meaningful progress in postgraduate studies in the foreseeable future. Judgment: ***Satisfactory.***

Peer Observation: This process is observed to be still in the formative stage and needs to be further developed. Judgment: ***Satisfactory.***

Skills Development: Quite in contrast to practices in other Engineering Faculties, the existence of a Department of Inter-disciplinary studies to provide services to other academic Departments is a good practice. The students have the choice of non-engineering modules to choose from. This is laudable. Judgment: ***Good.***

Academic Guidance and Counselling: There is a well developed academic guidance and counselling system in place. Judgment: ***Good.***

Based on the observations made during the visit the Review Team, the eight aspects under reference are judged as follows:

Aspect reviewed	Judgement
Curriculum design, content and review	Good
Teaching, learning and assessment methods	Good
Quality of students including student progress and achievements	Good
Extent and use of student feedback, qualitative and quantitative	Satisfactory
Postgraduate studies	Satisfactory
Peer observation	Satisfactory
Skills development	Good
Academic guidance and counselling	Good

The overall judgment is suspended

6. RECOMMENDATIONS

The Review Team makes the following recommendations to improve the quality of teaching, learning and evaluation process, The recommendations are given under the three categories titled 'human resources', 'physical resources' and 'procedures and processes'.

Human Resources

- Although, provision is made for adequate cadre positions in the DMME, recruitment and retention of senior staff is observed to be difficult. As a result there is a heavy dependence on visiting staff. Most of them come from Colombo on weekends and holidays. The UGC and the Ministry of Higher Education should introduce adequate enumeration packages and other incentives to attract and retain qualified academic staff.
- It is recommended that the junior academic staff is provided with training required for their promotions and the non-academic staff with training required for handling respective equipment.

Physical Resources

- The physical facilities available in the laboratories are inadequate and not up-to-date. Acquiring new equipment not only in the area of traditional mechanical engineering but also in the rapidly developing area of manufacturing is recommended, particularly because the name of the Department implies that there is an emphasis on manufacturing engineering.

- The Review Team experienced the sluggishness of the internet connection even at a time when the laboratory was not heavily used. Continuous upgrading of the computer laboratory, IT equipment and software is recommended.

Procedures and Practices

- Proper use of the information collected from the student feedback to improve the teaching-learning process is recommended.
- General non-participation of senior staff in conducting laboratory classes and leaving this activity in the hands of the temporary staff is inappropriate. The Review Team recommends that the senior academic staff take active participation in Laboratory teaching.
- It is a legal requirement in Sri Lanka to have licensed operators for boiler operations. It is recommended that the DMME complies with this requirement.

7. ANNEXES

Annex 1. Itinerary of the 3 day Visit

Day – 1 (8th of January 2007)

From	To	Activity
09.00	09.30	Welcome Meeting with the Dean and Head of Department
09.30	10.00	Discuss the agenda of the review
10.00	10.30	Tea Break
10.30	11.30	Department Presentation on the Self Evaluation Report
11.30	12.00	Discussion
12.00	01.00	Lunch Break
01.00	02.00	Meeting with Department Academic Staff
02.00	03.00	Observation of Laboratories
03.00	04.00	Meeting with students
04.00	05.00	Brief Meeting of Reviewers

Day – 2 (9th of January 2007)

From	To	Activity
09.00	10.00	Observe Teaching a Class (Class 01 at MLR)
10.00	10.30	Observe Documents
10.30	11.00	Tea Break
11.00	11.30	Observe Documents
11.30	12.30	Meeting with Technical Staff and other Non – Academic Staff
12.30	01.30	Lunch Break
01.30	02.30	Practical class (Practical 01 at M2 Lab)
02.30	03.30	Observation of other facilities (Computer Centre and Library)
03.30	04.30	Observe a Drawing class
04.30	05.00	Brief Meeting of Reviewers

Day – 3 (10th of January 2007)

From	To	Activity
09.00	09.30	Observation of Practical Class (Practical 02 at M5 lab)
09.30	10.00	Observe a Teaching Class (Class 02 at LT2)
10.00	10.30	Tea Break
10.30	11.00	Academic Guidance and Counselling Core Aspect Meeting
11.00	12.00	Meeting with Heads of departments and staff for Reporting
12.00	01.00	Lunch Break
01.00	05.00	Report Writing

Annex 2. Persons Met during the Visit

Academic Staff

Dr. AMN Alagiyawanna, Dean, Faculty of Engineering
Dr. (Ms.) GIP Perera, Head, Dept. of Mechanical and Manufacturing Engineering
Dr. SHKK Gunawickrama, Head, Dept. of Interdisciplinary Studies
Dr. HC Ambawatta, Senior Lecturer, Dept. of Mechanical and Manufacturing Engineering
Dr. B Sumith, Senior Lecturer, Dept. of Mechanical and Manufacturing Engineering
Dr. DHS Maithripala, Senior Lecturer, Dept. of Mechanical and Manufacturing Engineering, Student Counsellor, Faculty of Engineering
Mr. KJC Kumara, Probationary Lecturer, Dept. of Mechanical and Manufacturing Engineering
Mr. KDKA Somarathne, Probationary Lecturer, Dept. of Mechanical and Manufacturing Engineering
Miss. SMDP Samarakoon, Lecturer (Contract Basis), Dept. of Mechanical and Manufacturing Engineering

Dr A. L. Amarasiri, Deputy Senior Student Counsellor, Faculty of Engineering
Dr C S Lewangamage, Student Counsellor and Academic Warden (Male Hostels), Faculty of Engineering
Dr (Ms) G I P Perera, Academic Warden (Female Hostels), Faculty of Engineering
Mr W T G Samantha, Student Counsellor, Faculty of Engineering
Ms S N Malkanthi, Student Counsellor, Faculty of Engineering

Non-Academic Staff

Ms. GL Damayanthi, Technical Officer
Mr. ST Hemantha, Technical officer
Mr. TA Gunawardana, Draftman
Miss. RC Dinish Jayathri, Computer Application Assistant
Mr. MDS Fonseka, Labourer
Mr. JA Nandasena, Lab Attendant
Mr. TH Ajith Priyantha, Lab Attendant
Mr. DMGK Priyantha, Lab Attendant

Postgraduate Students

None

Annex 3. Teaching Sessions Observed

09/01/2007

1) Lecture (ME6315 Production Planning & Control, Semester 6 by Mr. KJC Kumara)

10/01/2007

2) Lecture (ME8322 Applied thermodynamics, Semester 8 by Mr. KDK Somarathne)
3) Practical (ME1301 Introduction to materials science &manufacturing engineering)
4) Drawing Class (ME1202 Engineering drawing, Semester 1 by Dr. HC Ambawatta)

Annex 4. Facilities Observed

1) Lecture theatres
2) All laboratories
3) Office space and staff rooms
4) Faculty library and computer centre

Annex 5. Documents Observed

1) Lecture notes and tutorials
2) Laboratory (Practicals) sheets - Old and new curricula
3) Module contents - Old and new curricula
4) Lists of academic advisors
5) Training programmes offered
6) Academic calendar
7) Corporate plan
8) Result sheets
9) Industrial visits (places)
10) List of Examiners and Moderators
11) Moderator comments on question papers
12) Marked assignments (Course work reports on Practicals)
13) Industrial training analysis
14) Graduates feed back on old curriculum
15) Questionnaire for final year students and fresh graduates
16) Students hand book 2005
17) Student hand book 2006 - (Draft)
18) Amended rules and regulations together with students comments
19) Minutes of Departmental meetings
20) Personal files of lecturers who are on study leave
21) Reports on industrial training and daily diaries
22) Project reports