SUBJECT REVIEW REPORT

DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING

FACULTY OF ENGINEERING
UNIVERSITY OF RUHUNA

08th to 10th January 2007

Review Team :
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CONTENTS

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 achievements. The subject review process evaluates the quality of 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 Civil & Environmental Engineering (DCEE) of 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 according to the aims and learning outcomes given in the Self-Evaluation Report (SER).

The following eight aspects of education were reviewed at the Departmental level:

- Curriculum design, content and review;
- Teaching, learning and assessment methods;
- Quality of students including student progress and achievements;
- Extent and use of student feedback (both qualitative and quantitative);
- Postgraduate studies;
- Peer observations;
- Skills development;
- Academic guidance and counseling.

The review team visited the department for three days, namely 8th, 9th and 10th January 2007. The agenda of the three-day visit is given in Annex 1. The information relating to the above eight aspects was collected by examining the SER submitted by the DCEE, by having discussions with the Dean, Head of the Department, members of the academic and non-academic staff, a group of undergraduate students and recent graduates (see Annex 2 for persons met during the visit), by peer observation of the teaching process (see Annex 3), by observing the facilities at the Department (see Annex 4) and by examining the documents provided by the Department (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 judgment is reported at the end of this report selecting one of the three options; confidence/limited confidence/no confidence; in the academic program.

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

The University of Ruhuna was inaugurated in 1978 with the main campus in Wellamadama, Matara becoming operative in 1984.

The Department of Civil and Environmental Engineering (DCEE) was established on 1st July 1999 as one of three degree awarding departments in the Faculty of Engineering (FOE), University of Ruhuna (UOR) at Hapugala, Galle. The DCEE offers a full time course leading to the degree of the Bachelor of the Science of Engineering (B.Sc.Eng.) in the field of Civil and Environmental Engineering (CEE). Students admitted to the FOE follow a common core course in the first two semesters. The DCEE offers 7 credits out of 36 credits offered in the common core course. At the end of the second semester, students are selected for specialization courses offered in three major fields of study, viz. Civil and Environmental Engineering (CEE), Electrical and Information Engineering (EIE) and Mechanical and Manufacturing Engineering (MME). At present, the DCEE offers 79 credits out of 102 credits required during the CEE specialization course.

The **vision** of the Department of Civil and Environmental Engineering is *to become an outstanding, well-recognized academic center of excellence in civil and environmental engineering in the country and beyond.*

It is the **mission** of the Department of Civil and Environmental Engineering *to produce highly-skilled, dedicated and knowledgeable civil and environmental engineers who will excel in their chosen careers.*

Since its inception, the DCEE has been gradually moving forward while trying to improve itself with regard to the quality of education in order to achieve the above vision and mission. The SER is a snap shot of the progress that the DCEE has made so far. The DCEE, being just over 6 years old, does not have many traditions. Therefore, it is understood that changes are feasible according to global developments in order to achieve the vision and mission. Until recently, the DCEE has been mainly depending on the government budget for capital and recurrent expenditures. However, since the latter part of year 2002 it has developed collaboration with the industry. Through these collaborations, some funds are generated for its development activities in addition to the government budget. Furthermore, this has enabled the DCEE to move towards achieving the objective of becoming a knowledge and resource base in CEE. Capital expenditure of DCEE is relatively high compared to a well-established department due to continuing laboratory development. The DCEE has taken all measures to implement a revised curriculum from the 8th batch of students (academic year 2006/2007) and also to increase the intake. Therefore, extra funds are required for further development of laboratories and other facilities.

The current annual intake of the FOE is about 200 students (being only 100 prior to 2006). These students follow a common course during the level 1 study. From level 2, students specialize in Civil & Environmental Engineering (CEE) and the current (2006) intake to the department is 39 (The number per batch is expected to become about 70 from 2007). At present the department offers one postgraduate degree in collaboration with the Faculty of Agriculture of UOR.

At present (2007 January) there are 15 Academic Cadre positions in DCEE, all of which are not filled (vacancies already advertised). The 03 positions for Technical Officers, 01 for Computer Application Assistant (CAA) and 03 for Laboratory Attendants are already filled, as is the 01 labourer position. There are 16 positions for Engineering Teaching Assistants to be filled. With the increasing student numbers, the cadre positions have to be increased [Source: Details provided by Dean and HOD].

3. AIMS AND LEARNING OUTCOMES

3.1. Aims

The aims of the department are as follows:

3.1.1 The prime objective of the Department is to produce graduates with necessary skills and knowledge to handle real world issues related to the Civil and Environmental Engineering field.

3.1.2 Provide advanced knowledge in Civil and Environmental Engineering related subjects.

3.1.3 Expose students to laboratory techniques and to use of laboratory and field equipment during the programme.

3.1.4 Organize field trips to expose students to more practical aspects, allowing them to broaden and deepen their knowledge and experience in the industry.

3.1.5 Provide opportunities for students to work independently; identify problems; design experiments; use statistical tools; analyze data using statistical packages; report data; and to present & defend their results.

3.1.6 Expose the students to real engineering issues through the surveying work camp and allow them to apply the theory that they learn into practice.

3.1.7 Provide knowledge of Civil and Environmental Engineering design concepts and applications through well-organized design sessions.

3.1.8 To produce graduates who are dedicated to their professional life.

3.2. Learning Outcomes

On the successful completion of the B.Sc.Eng. Degree program specialized in Civil and Environmental Engineering, students should have obtained:

3.2.1 General knowledge and understanding of various disciplines in Civil and Environmental Engineering.

3.2.2 The ability to face future challenges in the Civil and Environmental Engineering industry.

3.2.3 Use the knowledge and experience gained during four-year period to do innovations and inventions in Civil and Environmental Engineering field.

3.2.4 Personal and transferable skills such as clear observation, critical thinking, analysis of data and interpretation of results, presentation and communication and the ability to apply these skills in various situations.

3.2.5 The necessary skills for self-directed learning.

3.2.6 Research knowledge and skills through undergraduate projects and ability to apply them.

3.2.7 Knowledge of the role of an engineer in society, and the effects that engineering will have on society in terms of economic, social and environmental concerns.

3.2.8 The skills of management and leadership.

4. FINDINGS OF THE REVIEW TEAM

The following eight aspects of education reviewed at the Departmental level are described in sub sections 4.1 to 4.8.

- Curriculum design, content and review;
- Teaching, learning and assessment methods;
- Quality of students including student progress and achievements;
- Extent and use of student feedback (both qualitative and quantitative);
- Postgraduate studies;
- Peer observations;
- Skills development;
- Academic guidance and counseling.

4.1. Curriculum Design, Content and Review

The DCEE at University of Ruhuna has reviewed and changed its curriculum in 2006 as shown in Section 4.1 of the SER. Given that the program commenced only in 1999, this demonstrates a willingness to be proactive and initiate change. These changes have been made after extensive discussions within the DCEE and also after getting feedback from industry and from the Engineering Faculties at Peradeniya and Moratuwa. [Sources: SER and Discussion with HOD]

Some positive aspects of the changes are the introduction of a capstone design project at Semester 7 and the provision of a broader introduction to Civil Engineering to all students in the common first year. [Sources: SER, HOD presentation and discussions]

Some good practices in the original program continued in the revised one are the industrial training (in two sections of 3 months each so that students get a varied experience), research project and a survey camp that sets challenging design exercises.

The program is probably the only one in the country termed "Civil and Environmental Engineering", and there is a reasonably high emphasis on Environmental Engineering, inclusive of a well equipped lab, and many important books on the subject matter in the library. However, the DCEE is somewhat hampered by the current shortage of qualified permanent staff in Environmental Engineering. (One staff member currently continuing her Ph.D studies is expected back this year). It could also explore the possibility of introducing aspects of sustainability into as many modules as possible (e.g. energy saving buildings, sustainable building materials, life cycle costing, environmental impact etc.)

Considering all the above the review team judged this aspect as GOOD.

4.2. Teaching, Learning and Assessment Methods

Teaching and learning are carried out through a combination of methods such as lectures, tutorial assignments, practical classes, industrial visits, mini projects, presentations, industrial training, survey camp etc.

One good feature of laboratory assignments is that students are given lab sheets prior to coming to labs and have to finish and submit their assignments before leaving the lab,

thus encouraging independent work. Due to a shortage of instructors, final year students are recruited as visiting instructors and teach junior students in the labs, under the guidance of the academic staff, who do all the grading. This appears to give the final year students a sense of confidence, responsibility and ownership of the program. The support given by the non-academic staff is also very good. Our observation of this process was generally quite positive. [Sources: SER, Discussions with students and staff]

Industrial training for 6 months (2 * 3 months) given at levels 1 and 3 is found to be an essential and important component of the program. This training was appreciated by both students and recent graduates alike.

The module assessment method consists of continuous assessment (CA) and end-of-semester examination. By setting a criterion for each course module, taking in to consideration the weight of its components such as labs, tutorials, assignments etc. to get the eligibility to sit for the end-of-semester exam, the students are continuously monitored right throughout the semester. [Sources: Performance criterion file, Discussions with staff]

It was evident that staff took a considerable interest in correcting continuous assessment submissions.

The review team witnessed the availability of computer and Internet facilities for students at a central computer centre. This facility is expected to enhance student's self-learning abilities. However, since the available computer terminals are limited, students face hardship and inconvenience due to this, especially when computer classes are also held. With the additional grants promised by the UGC for doubling the intake from 2006, additional computer facilities are expected to be provided. [Source: Discussion with the Dean]

The library facilities are also reasonable, although multiple copies of recommended books are in somewhat short supply, according to students. The library also has around 150 seats and a separate reading room another 100 for students to study. Final year project reports are also available in the library. The number of journals should be increased within the available budget.

Lecture theatres, lecture rooms and drawing offices are also in good condition, although the large lecture theatres may require a sound system. There is intention to provide more fixed audio-visual facilities in lecture rooms too. Also, with the increased intake from 100 to 200 students to the faculty, more large theatres may be required.

The six laboratories are reasonably well equipped, some (e.g. the Environmental Engineering lab) more than others. The large space available in the labs is an asset for future improvements. There are no lifts yet in operation and technical staff complained about problems when having to move heavy equipment (up to 3 storeys) upstairs. The possibility of providing this facility in the near future should be explored.

A case could be made for increasing laboratory staff where necessary, based on the increased student intake, as all lab staff (both Technical Officers and Lab attendants) are currently responsible for two laboratories. This creates problems when lab classes are held in both labs simultaneously and also when they have to assign someone to be in charge when taking leave.

On the basis of its observations, the review team considers that overall teaching, learning, and assessment aspects are GOOD.

4.3. Quality of Students, including Student Progress and Achievements

Student demand for the Engineering program at Ruhuna is low compared to the demand for Moratuwa and Peradeniya. However, this does not necessarily mean that the quality of students entering the faculty is low, because entry for engineering programs overall is very competitive.

At the end of the first year, students option for one of three specializations, namely Civil & Environmental Engineering, Mechanical & Manufacturing Engineering or Electrical & Information Engineering. The demand for DCEE within the engineering faculty at Ruhuna had been declining from the 2000 to the 2003 cohorts, but has increased since then, with the 2005 cohort displaying the highest demand for the DCEE program compared to the other two, based on percentages of students offering a program as their first choice [Source: Supporting Document – student field selection data].

Whatever the quality of the students at intake, the graduates from the program have performed very well. Of the three batches that have graduated, the last two have produced the gold medal winners (for overall best performance in the faculty). The average overall GPA is around 3.16 and the average percentage of first class graduates is around 12% [Source: SER].
Employability of graduates has also been very good, with the third batch of graduates being employed immediately after completion of their academic programs.

The first DCEE graduate to get a full scholarship for postgraduate study abroad has started her studies in the AIT this year.

Considering all the above the review team judged this aspect as GOOD.

4.4. The Extent and Use of Student Feedback

The DCEE has developed a set of questionnaires to get the student feedback with regard to delivery of both lectures and continuous assessment exercises (e.g. labs, design classes etc.). These responses are both quantitative and qualitative. The obtaining and processing of feedback is done by the Head's office, and hence is a very independent assessment. After the feedback has been obtained and analyzed, academic staff are shown a comparison of their performance in relation to the best and worst performances. Comments written by students on the questionnaires can be read by staff after the analysis has been completed.

Qualitative student feedback is also obtained by informal discussions that students have with individual lecturers, module coordinators, academic advisors and the Head of Department. It was also gathered from students, academic staff and student counselors that the Ruhuna engineering faculty, perhaps because of its small size and relatively young staff, enjoys very good staff-student interaction.

There may be a case however, for regular (even once a semester) formal meetings between the Head (with or without the rest of the staff) and student representatives, in order that students are assured of some kind of an "official" channel for their ideas and problems.

The extent and use of student feed back in the DCEE of UOR can be rated as GOOD.

4.5. Postgraduate Studies

The DCEE joined with the Faculty of Agriculture, University of Ruhuna, to start an international M.Sc. program on Social Water Management in 2006. The contents of seven civil engineering related courses were developed by the DCEE and the lectures and practical components of those courses are to be conducted by the staff of DCEE. Since DCEE is supporting the Faculty of Agriculture with the obvious need for foundation level work for graduates of another discipline, the level of these courses does not appear to be much higher than those at the engineering undergraduate level [Source: The syllabus provided].

Although DCEE has had only 7 years of existence, it does now have 11 PhDs and some well equipped labs too. As such, there should have been greater evidence of wanting to start postgraduate research or teaching programs, in terms of definite plans and strategies. One reason cited was the absence of willing graduate students to work at DCEE with the job situation in the industry being very favourable for B.Sc.Eng (Civil) graduates after the Tsunami of 2004.

There are of course problems. There is no university funding for research up to now - however other sources of funding (e.g. NSF, NRC) have not been pursued either. Neither have significant attempts appear to have been made to attract research students. A case can be made for converting unfilled ETA (Engineering Teaching Assistant) posts to Research Assistant posts. The journal collection in the library is fairly basic, though the internet is available for downloading limited research publications. Staff are also burdened with many administrative responsibilities at Faculty level (e.g. Dean, Senior Treasurer, Senior Student Counsellor, Deputy Proctor, Warden etc.), and they feel a responsibility to carry these "burdens", being members of the largest Department. [Source: Discussions with the staff]

On a more positive note, DCEE staff has in fact published research done through undergraduate projects, mostly as conference papers. They also supervise these projects well, with a supervisor being backed up by a committee too.

Nevertheless, ***this aspect has been deemed UNSATISFACTORY by the review team***. However, the team is confident that the DCEE has the resources to improve this situation very soon.

4.6. Peer Observation

The DCEE of UOR does not have any formal peer evaluation procedure. However, one member of staff had taken the initiative to get one of his lectures audited and had obtained written comments from two of his peers.

The quality of visiting staff is assessed through feedback from students and informal discussions are held among internal staff members about shortcomings in delivery and methods of improvement.

Internal moderation of end of semester examinations is carried out. There is no external moderation carried out, although the department was receptive to the idea. This would be fairly important, especially as the vision of the DCEE is to be recognized in the country and beyond.

Considering the above and the measures that are expected to be implemented in near future, the review team is of the opinion that this aspect is SATISFACTORY.

4.7. Skills Development

Right from the orientation program, the students at the FOE of UOR and the DCEE in particular are exposed to skills development. The orientation program has three components, namely communication skills (i.e. in English), computer skills and social awareness, where they are exposed to a variety of professionals from outside the university.

The DCEE has many opportunities for students to practice and improve their communication skills. One academic even provides dictionaries for students to improve their writing skills, which is commendable.

We found the students we met, both from the common first year and also from the 2nd, 3rd and 4th years in the DCEE to be very articulate and confident. The same could be said of the graduates we met.

Laboratory classes, design assignments and projects of various sorts (e.g. survey camp assignment, research project etc.) are used to impart appropriate skills to students who go through the program. In particular, the research project is well coordinated and assessed, with 2 progress reviews in addition to the final submission. The new curriculum has also introduced a capstone design project in the final year.

Considering the above, the review team judges this aspect as GOOD.

4.8. Academic Guidance and Counseling

As given in the SER and as explained in the meeting with academic counselors, all students are assigned academic counselors in the common first year (7 students per staff member) and thereafter during the DCEE program (5 students per staff member). Students have to get their academic counselor's ratification on the selection of modules for registration for a particular semester or term, so this provides a natural means of contact.

Student counselors are also available for general student problems. Once again, because of the small community at the FOE of UOR and the relatively young staff, staff approachability is very high and there appears to be a high degree of co-operation between staff and students. Reportedly, not a single day has been lost due to student strike action since the commencement of the faculty in 1999, something that is highly commendable. The academic staff makes it a point to visit even the rented houses to see the accommodation facilities available to students. [Source: Discussion with the counselors].

The DCEE staff is very involved in faculty wide counseling too, with 3 out of the 7 counselors being from the DCEE. In addition, the Faculty Warden, Senior Treasurer, Director of Engineering Education (who is responsible for the orientation program and industrial training placements) and Deputy Proctor are all from DCEE. The counseling staff would appreciate if further professional training in counseling is provided to them.

Students do of course have certain constraints, such as shortage of sports facilities (despite which they perform very well) and somewhat inadequate canteen and hostel facilities. The doctor assigned to the faculty medical centre visits the Hapugala campus only on certain days. At the least a trained full time nurse is desired in the medical center. The labs need telephone connections in case of an emergency. These should be addressed by the university/UGC. It may be that students have a fairly high level of tolerance for these inadequacies because of their commitment to a new faculty. However, in order to

improve the actual implementation of change, liaison meetings between staff and students on these matters (e.g. canteen committee, hostel committee, even a 'Saukyadana' type first aid unit that we suggest) could be made more formal, inclusive of the keeping of minutes. The students also pointed out their cultural isolation from the main University, the journey to which involves travel by three buses. This situation can be easily remedied by arranging some public transport between the main campuses of the UOR. The review team is confident all these matters can be amicably resolved with continuous dialogue among staff and students, and help from UGC and other government agencies as required.

Considering the above, the review team judges this aspect as **good**.

5. CONCLUSIONS

Curriculum Design, Content and Review: The curriculum covers the basics required for a first degree engineering program and also provides project type experiences for students. The DCEE has revised the curriculum after 6 years, indicating a commitment to improvement and relevance. *Judgment: Good*

Teaching, Learning and Assessment Methods: A number of teaching methods are used and the courses are taught mainly by lectures, practicals, discussions etc. The survey camp, industrial training, research project and proposed capstone design project also contribute significantly to the teaching/learning process. Staff involvement in grading and giving feedback to students is very high. To further improve the teaching and learning process it is recommended that better computer and laboratory facilities (perhaps inclusive of increased lab staff) are provided. The academic staff cadre has also got to be increased to cater to the increased student numbers. *Judgment: Good*

Quality of Students, including Student Progress and Achievements: Although students with the best GCE (A/L) results are not yet attracted to Ruhuna, the ones who do enter Ruhuna are still quite good. The demand for the DCEE program at the end of the first year is also good. The performance of students within the program and graduates in industry is very good. Student motivation and pride in belonging to the DCEE and the Ruhuna engineering faculty are extremely high. *Judgment: Good*

Extent and Use of Student Feedback, Qualitative and Quantitative: The teacher evaluation by students is implemented on a regular and comprehensive basis at present. Staff accessibility to students is also very high. *Judgment: Good*

Postgraduate Studies:
At present, the DCEE conducts one PG taught course in collaboration with the faculty of agriculture of UOR. Given that the DCEE has 11 PhDs and at least some well equipped labs, a greater degree of motivation for postgraduate research, for example at least in the form of concrete plans and strategies (in writing and agreed on by the entire DCEE), could have been evident. The review team hopes this situation will improve with research funding from University and other sources so that good quality postgraduate research students can be attracted and retained. *Judgment: Unsatisfactory*

Peer Observation: Although peer observation is not formalized, there appears to be a motivation for moving towards formalizing this and also for using external moderators. There is informal discussion regarding ways of improving curriculum delivery among the DCEE staff. *Judgment: Satisfactory*

Skills Development: Students are given opportunities to develop their skills in areas such as presentation, computer and personal skills and also technical skills. It is recommended that the computer facilities and internet speeds available to the students be further enhanced if means can be found. Student attitudes towards the DCEE, the faculty and their profession are extremely good. *Judgment: Good*

Academic Guidance and Counseling: There is good academic counseling both in the common first year and in the DCEE program in subsequent years. Staff-student contact is very good and cordial. DCEE staff are actively involved in and give leadership to faculty wide guidance and counseling activities. *Judgment: Good*

Based on the observations made during the visit by the review team, the eight aspects were judged as follows:

Aspect Reviewed	**Judgment Given**
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	Good
Postgraduate studies	Satisfactory
Peer observations	Satisfactory
Skills development	Good
Academic guidance and counseling	Good

Overall Judgment - Suspended

6. RECOMMENDATIONS

In most of the aspects the review team found that the ways things are done at the DCEE are commendable. While experiencing the lack of funds and other problems inherent to all the Sri Lankan universities, the high morale and positive attitude of the staff (both academic and non-academic) and students should be commended.

Based on the findings indicated above the review team wishes to make the following specific recommendations.

- Definite plans for postgraduate programs, especially research, should be formulated and agreed upon as soon as possible. Funds could be obtained from the University or externally to support such programs.
- To further improve the teaching and learning process it is recommended that better computer and laboratory facilities are provided. The number of academic staff must be increased to meet the increased student numbers and increases in lab staff should also be considered. The labs should be given a lift and telephones to complement the existing good facilities.
- It is recommended that the medical facilities be improved with at least a para-medical officer if not a doctor staffing the medical centre on a daily basis. Greater first aid facilities should be provided until the above is implemented, in addition to having first aid facilities in laboratories, especially in the Environmental Engineering Laboratory. Consideration could also be given to having a part time professional counselor (say 2 days of the week).
- A gymnasium and a playground are required for the students. Until these take shape, transport facility could be provided to the main campus or to other facilities in Galle (e.g. schools). If possible, a request could be made from SLTB for an hourly Hapugala-Galle-Matara-Wellamadama bus providing a link between the main campuses, while serving the public too.
- It is recommended that the improvement of student welfare facilities such as canteen and hostel facilities be looked into, inclusive of security in hostels outside the premises. Also, student-staff liaison committees that look into these matters could be formalized, e.g. by keeping minutes, so that decisions taken are implemented quickly.
- Given that many lectures are conducted on weekends by visiting staff and since this inconveniences students with respect to their leisure (e.g. going to their homes), consideration should be given to observing say Sunday and Monday as the weekend, as done in at least one other faculty in the Sri Lankan university system.
- Special attention is needed for the female hostel as some facilities available for students are inadequate. In particular there are not enough reading tables for students (e.g. an 8 chair table for 10 students) or lockers (in shared rooms) to keep their basic necessities.

7. ANNEXES

ANNEX 1 – AGENDA OF THE 3 DAY VISIT

Day 1 : 08/01/2007 Monday

From	To	Activity	Venue
08:30	09:00	Meeting with the review panel and QAA Council representatives	Board Room
09:00	09:30	Meeting with the Dean and the Head of the Department	Deans Office
09:30	10:00	Discuss the Agenda for the review with the HOD	DCEE-CR
10:00	10:30	Tea	DCEE-CR
10:30	11:30	Department Presentation on the Self Evaluation Report	DCEE-CR
11:30	12:30	Discussion with HOD and other staff members	DCEE-CR
12:30	13:30	Lunch Break	Guest House
13:30	14:30	Observing Computer center, Library and lecture theaters and drawing rooms	
14:30	15:30	Observing departmental facilities (Laboratories, seminar room)	DCEE
15:30	16:30	Meeting with Department Academic staff	DCEE-CR
16:30	17:30	Meeting with undergraduates (4^{th},6^{th} and 8^{th} semester students)	DCEE-CR
17:30	18:00	Meeting with undergraduates (1^{st} semester general batch students)	DCEE-CR
18:00	18:30	Brief meeting with reviewers	DCEE-CR

Day 2 : 09/01/2007 Tuesday

From	To	Activity	Venue
08:30	09:00	Observing documents	
09:00	10:00	Observing Teaching (4^{th} Semester Practical Classes; CE4306/ CE4308/ CE4309; 30 min for each laboratory)	
10:00	10:30	Observing Teaching (1^{st} Semester Lecture; CE1301)	LT1
10:30	10:45	Observing students facilities (Canteen, Medical centre etc)	Canteen
10:45	11:00	Tea and observing documents	DCEE-CR
11:10	12:15	Observing Students' Presentations (Progress presentations of undergrad projects, 5 projects selected by the reviewers)	DCEE-LR
12:15	13:00	Observing Documents	DCEE-CR
13:00	14:00	Lunch	Guest House
14:00	15:30	Private discussion of reviewers and Observing Documents	DCEE-CR
15:30	16:30	Meeting with Technical Staff and Other Non-Academic Staff	DCEE-CR
16:30	17:00	Meeting Student Counselors and Academic Advisors	DCEE-CR
17:00	17:30	Meeting with graduates of DCEE	DCEE-CR
17:30	18:00	Meeting of Reviewers and report writing	DCEE-CR

Day 3 : 10/01/2007 Wednesday

From	To	Activity	Venue
08:30	09:00	Observing documents	DCEE-CR
09:00	09:20	Observing Teaching (8^{th} Semester Lecture; CE8274)	DCEE-LR
09:20	09:40	Observing student Hostel- (Female)	Hostel
09:45	10:15	Observing Teaching (4^{th} Semester Lecture; CE4309)	DO2
10:15	10:55	Meeting with HOD, Department of Inter-Disciplinary Studies	DEE - CR
10:55	11:05	Tea and Reviewers Private Discussion	DCEE-CR
11:00	12:00	Meeting with Head and Staff for Reporting	DCEE-CR
12:00	13:00	Lunch	Guest House

Note: DCEE-CR = Conference Room at 1^{st} Floor of DCEE Building
DCEE-LR = Lecture Room at 1^{st} Floor of DCEE Building
LR1 = Lecture Room No. 1 at 2^{nd} Floor of Lecture Theater Building
DO2 = Drawing Office No. 2 at 3^{rd} Floor of Lecture Theater Building
Board Room and Deans Office are in the Administration Building

ANNEX 2 - PERSONS MET DURING THE VISIT

Academic Staff

Dr. Nayana Alagiyawanna Dean, Engineering.
Dr. G.H.A.C. Silva HOD (DCEE)
Dr. A.K. Somasundaraswaran
Dr. A.M.N. Alagiyawanna
Dr. T.M.N Wijayaratna
Dr. M.S. De Silva
Dr. A.L. Amarasiri
Dr. C.S. Lewangamage
Dr. K.S.Wanniarachchi
Dr. N. Priyankara
Dr. H.P. Sooriyarachchi
Ms. T.N. Wickramaarachchi
Ms. W.H.C. Subhashini
Mr. J. Gurusinghe Arachchi (Senior Assistant Librarian)

Technical/Non-Academic Staff

Ms DAM Nimal Shanthi
Mr TMP Wasantha Kumara
Mr Lalitha Samarajeewa
Ms Nishangi Iresha Gamage
Mr NTPD Devapriya Nilantha
Mr DD Ponnamperuma
Mr MMI Vipula Shantha
Mr V Nandadasa
Mr. Chamila Gunatilaka

Undergraduates of the DCEE (Semesters 4, 6 and 8)

Wickramashinghe WRMBE
Jayalath WPAK
Edirisinghe DD
Mallikarachchi TD
Dilrukshi ALA
Withanage KR
Hemakanth S
Kumara GHASS
Wasantha PLP
Basnayaka GYAN
Sugathapala HE
Sakura GB
Mendis AAC
Wijesooriya RMSD
Menike JMNUJ
Gamage HGMI
Nanayakkara HNYC
Sahabdeen ALM
Mujahid AHM
Sathyadasan A

First Year Undergraduates

Rathnayaka HHMP
Samarakkody SD
Munasinghe HK
Somarathna PTD
Pooncalalon Y
Uduweriya RBYB
Dharmadasa MDVS
Lakshika MS

Recent graduates

Ms NHC Subashini
Mr PDD Dayawansa
Ms TMCM Menike
Mr KSS Munasinghe

Student Counsellors

Ms SN Malkanthi
Dr DHS Maithripala
WTG Samantha
Dr. LB Perera
Dr. MS de Silva
Dr KS Wanniarachchi
Dr GHAC Silva
Dr Sujeewa Lewangama
Dr Aruna Amarasiri

ANNEX 3 – LIST OF TEACHING SESSIONS OBSERVED

8th January 2007

Practical 1 (CE4306) – Design of Concrete and Masonry Structures, 4th Semester
- CEL1 - Building Materials and Construction Laboratory

Practical 2 (CE4308) – Water and Wastewater Engineering, 4th semester
- CEL5 - Environmental Engineering Laboratory

Practical 3 (CE4309) – Engineering Geology and Soil Mechanics, 4th Semester
- CEL2 - Geotechnical Engineering Laboratory

Lecture 1 (CE1301) – Fundamentals of Civil Engineering; 1st Semester, Dr Sampath De Silva

9th January, 2007

Lecture 2 (CE8274) – 8th Semester, Dr Amila Silva

Lecture 3 (CE4309) – Engineering Geology and Soil Mechanics, 4th semester, Dr. Priyankara

ANNEX 4 – LIST OF FACILITIES OBSERVED

- Lecture Theatres LT1, LT2, LR1
- Design Offices DO1, DO2
- Conference rooms and lecture room at the DCEE
- Laboratory Facilities
    - CEL1 - Building Materials and Construction Laboratory
    - CEL2 - Geotechnical Engineering Laboratory
    - CEL3 - Transportation Engineering and Surveying Laboratory
    - CEL4 - Structural Mechanics Laboratory
    - CEL5 - Environmental Engineering Laboratory
    - CEL6 - Hydraulics and Coastal Engineering Laboratory
- Office Space and Staff Rooms
- University Library and Computer Centre
- Photocopy Facilities
- Canteen Facilities and Medical centre (closed)
- Hostel Facilities (Female hostel)

ANNEX 5 – LIST OF DOCUMENTS OBSERVED

- Guidelines for Preparation of Undergraduate Project Report
- Marking scheme for Final year Research Project Evaluation
- Core, Technical-elective and General-elective modules offered by the DCEE
- Summaries of the Teacher Evaluations by the Students and the Related Forms
- Summaries of the surveys conducted by the Department -Student feed back
- Civil Engineering related Module Contents for International M.Sc. Programme on Social Water Management
- Performance criterion for B.Sc. Engineering degree program
- Detailed Syllabi of the Course Units conducted by the Department for four levels
- Minutes of the Departmental Meetings and the Minutes of the Curriculum Development Committee Meetings
- Final Year Students' Project Reports/progress reports
- Students' Practical Record Books
- Teaching Material (lecture notes and practical handouts)
- Research Papers and Other Publications by the Academic Staff Members of the Department
- Teaching learning and assessment methods file
- Past Examination Papers and Model Answers
    - CE 1301 – Mechanics of Materials
    - CE 3303 – Structural Analysis
    - CE 3304 – Fluid Mechanics
    - CE 3305 – Construction Process and Surveying
    - CE 5311 – Design of Steel and Timber Structures
    - CE 5312 – Transportation Engineering
    - CE 5313 – Hydraulic Engineering
    - CE 5318 – Solid Waste Management
    - CE 7319 – Computer Analysis of Structures
    - CE 7320 – Environmental Engineering Design
    - CE 7321 – Geotechnical Engineering Design

CE 7261 – Advanced Surveying
CE 7262 – Coastal Engineering and Management
CE 7264 – Transportation Management
CE 2402 – Infrastructure and Environment
CE 4306 – Design of Concrete and Masonry Structures
CE 4308 – Water and Wastewater Engineering
CE 6314 – Advanced Design of Concrete
CE 8273 – Highway Engineering Design
CE 8223 – Environmental Management
CE 4307 – Infrastructure Planning
CE 4309 – Engineering Geology and Soil Mechanics
CE 5310 – Solid Waste Management
CE 6415 – Building Engineering
CE 6316 – Engineering Hydrology
CE 6317 – Geotechnical Engineering
CE 6318 – Advanced Structural Analysis
CE 8322 – Construction Management
CE 8271 – Ground Improvement Techniques
CE 7363 – Irrigation Engineering
CE 8262 – Coastal Engineering and Management