

SUBJECT REVIEW REPORT

**DEPARTMENT OF
COMPUTER ENGINEERING**



***FACULTY OF ENGINEERING
UNIVERSITY OF PERADENIYA***

10th to 12th February 2009

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1. SUBJECT REVIEW PROCESS

Subject review process of the University Grants Commission (UGC) involves evaluating the quality of education within a specific subject or discipline, focusing on the student learning experience and on student achievement. This subject/program 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 Computer Engineering of the Faculty of Engineering at the University of Peradeniya was conducted following the guidelines provided in the Quality Assurance Handbook for Sri Lankan Universities, published by the Committee of Vice Chancellors and Directors (CVCD) and UGC in July 2002. The quality of education was reviewed according to the aims and learning outcomes given in the Self-Evaluation Report (SER) of the Department, which was made available to review team 2 weeks prior to the review.

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

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 observations;
7. Skills development;
8. Academic guidance and counselling.

The review team visited the Faculty for three days, namely 10th to 12th February 2009. The agenda of the three-day visit is given in Annex 1. The information related to the above eight aspects were collected by:

- Having discussions with the Vice Chancellor, Dean of the Faculty of Engineering, Head of the Department Computer Engineering, members of the academic and non-academic staff, undergraduates, Academic Counsellors, Proctor, Deputy Proctor at the Faculty of Engineering, Head of Industrial Training and Career Guidance Unit of the Faculty of Engineering, Faculty's Library Staff, Staff at the Physical Education Unit and Staff at the university IT Centre. .
- Peer observation of the teaching process
- Observing the facilities at the Faculty and the Department, and
- Examining the documents provided by the Department (see Annex 2 for the list).

At the end of the 3rd day of the visit, an opportunity was given to the academic staff to respond to various clarifications the review team requested.

Each of the eight aspects was judged as good/satisfactory/unsatisfactory, noting the strengths, good practices and weaknesses in each.

The review report is organized as follows: After presenting a brief history of the University of Peradeniya and the Department of Computer Engineering in section 2, the section 3 presents the aims. The findings of the review team on each aspect are presented in section 4.

The judgments on each of the eight aspects are presented in section 5. The report finally provides some recommendations to improve the quality of the programme.

2. BRIEF HISTORY OF THE UNIVERSITY AND THE DEPARTMENT

Vision

The vision of the Computer Engineering Department is to be a competitive teaching entity in computer engineering in the country and the region and to produce graduates with international recognition for their knowledge and skills, who are capable of taking a leadership position in the broad aspect of computer engineering.

Mission

The mission of the Computer Engineering Department is to keep the academic program on par with internationally recognized programs incorporating the rapid changes taking place in the industry, and teaching/coaching students to acquire the knowledge base and to develop their soft skills, and to enhance their career mobility internationally, making sure that our graduates are: (1) able to understand the basic principles that trigger present electronic and computational technology; (2) capable of creatively applying their understanding of science and engineering principles to solve problems arising in the career path they choose; (3) competent in communicating their ideas clearly and succinctly in all forms; and (4) proficient in engaging in lifetime learning which will be essential for progressing in their career.

The department of Computer Engineering is renowned for the quality and intensity of its educational experience. At present, the department is mostly involved in teaching undergraduate courses for Computer Engineering students. The Department of Computer Engineering is the successor to the Department of Computer Science which was the service department to all the departments till the establishment of the Department of Computer Engineering was established in 1985.

Computer Engineering degree program started in 2000, and at the time of the inception, the program was offered under the yearly based (not semester based) systems. In 2004, the Faculty switched to semester based system in compliance with the international standard. In 2000, only a few computer subjects were offered, but when the Faculty changed to the semester based system, more courses were offered in a structured way. Literally, this was the first structured syllabus designed for computer engineering program under semester based system. A major restructuring was done in 2007 making the program competitive with most of the internationally acclaimed programs.

The demand from the students for Computer Engineering has been high and a limited number is admitted to follow it. The graduates who have specialized in Computer Engineering are highly sought after by local as well as foreign employers. The present intake to the department is 60 students per year.

In the current trend of Computer Engineering and Information Technology teaching, there is a tendency to teach the details of the latest technology so that students will have the latest in-demand skills. However, with the speed of changes in the target industry of these students, such skills will soon be out-of-date and therefore at CS, the department believes that a much better approach is to teach the students the foundations of Computer Engineering and

Information Technology - principles that will allow them to adapt to the inevitable changes in technology.

3. AIMS AND LEARNING OUTCOMES

3.1. Aims

As mentioned in the vision statement, the aim of the Department is to provide a competitive teaching environment to the students and to produce graduates with international recognition for their knowledge and skills.

3.2 Learning Outcomes

The Faculty of Engineering is committed to produce outstanding engineers by pursuing quality teaching and research. The academic programs offered by the faculty are designed with this objective in mind.

As mentioned in the mission statement, the Department endeavours to achieve the objectives by producing graduates having the following characteristics:

- (1) Ability to understand the basic principles that trigger present electronic and computational technology
- (2) Capability of creatively applying their understanding of science and engineering principles to solve problems arising in the career path they choose
- (3) Competency in communicating their ideas clearly and succinctly in all forms
- (4) Proficiency in engaging in lifetime learning which will be essential for progressing in their career.

4. FINDINGS OF THE REVIEW TEAM

This section summarizes the findings in each of the eight aspects highlighted by quality review guidelines. A judgment on each aspect is based on the self-evaluation report and the evidence gathered during the visit.

This includes

Discussions with the Dean, Head of the Department, members of the academic and non-academic staff, and a group of undergraduate students

- peer observation of teaching and tutorial work
- observation of the facilities in the Department/Faculty examining the supporting documents provided by the Department

We wish to make a special note on the excellent cooperation extended by the entire staff including the Head of Department during this visit.

4.1. Curriculum Design, Content and Review

The curriculum provides a strong foundation in Computer Engineering. It has been intentionally designed to produce a broad-based computer engineer, rather than a specialized

one. The curriculum also has a strong bias towards Electrical Engineering.

However, students revealed that 70% of graduates find employment in the software industry and the rest in the area of Networking.

There is no evidence that internationally accepted guidelines such as the ACM's "Computing Curricula" have been used in the curriculum development or review processes. The objectives and/or learning outcomes of the course modules are not indicated in the documentation examined.

Formalization of the industry feedback process is recommended via a mechanism such as the Department-Industry Consultative Board.

It is commendable that the Department is in the process of obtaining IESL accreditation.

Enhancement of student skills

The method of evaluation includes continuous assessment and the end-of-semester examination. Some lecturers indicated that they require students to make presentations in class as part of the continuous assessment.

It was noted that much of the project work was contained in elective courses.

Laboratory classes viewed revealed that the instruction sheets were of varying quality. It was felt that some practicals could be updated to reflect current technology.

Final year project reports seen were also of varying quality. No uniformity was observed. Setting guidelines for reports can be suggested to improve students' writing skills.

A component in the curriculum could be introduced to enhance students' skills in research and independent learning and to nurture their 'investigative spirit'.

Involvement of CE students with the IEEE student society and participation in student competitions can be recommended in order to further enhance their skills.

Industry placement (Industrial Training)

Industry placement period is 6 months. Placements are made after industries interview students. Almost all students have their industrial placements in organizations located in Colombo. It is commendable that academic staff visit the trainees during the placement period. Students submit a report and their daily diary at the end of the period.

The staff of the Industrial Training and Career Guidance Unit reviews each student's report, suggests corrections and improvements. Students are expected to make the amendments and submit the final report.

Some reports and daily diaries were examined during the review process. It was noted that the reports contain organizational information in addition to the technical information regarding the work done during training. Students (final year undergraduates) were also satisfied with the training they had received.

Curriculum review

The first curriculum based on the semester system had been introduced in 2004. This has been revised in 2007. The revision is very logical; Some EE content has been reduced and some modules which were optional have been made compulsory.

Informal views have been sought from alumni and industry during this revision.

The view of the Review Team is that the Curriculum Design, Contents and Review can be judged as GOOD.

4.2. Teaching, Learning and Assessment Methods.

Conduct of Courses

Conduct of courses were observed to be effective and of good quality overall. Teaching by staff was observed during on-going lectures and laboratory sessions. Discussions with students and other sources also helped to gather information about the teaching and learning.

- Overall conduct of courses can be categorized as good and effective; some improvements are possible (as stated separately).
- Staff commitment and dedication is commendable. It was evident that staff had to spend extensive amount of time in academic activities, both formal and informal.
- Human and others resources for conducting of the courses are reasonably good. Contribution from the other Departments in the Faculty, especially from Electrical and Electronic Engineering, is significant and needs to be specially recognized. To keep up the quality with the increased intake, however, it would be prudent to acquire more human and physical resources into the Department.
- Use of the Course Management System (CMS) for conducting courses is significant and commendable. Heavy use of CMS for staff-student interaction is seen in many courses. In some cases, feedback and assessment results had been given quickly to students.
- Departmental library is seen as a useful resource for students; it is possible to improve it with up to date books (perhaps by getting support from alumni and/or industry).
- Laboratory facilities and equipment need to be expanded and improved to facilitate a quality engineering education. Instruction sheets for lab sessions in some courses should be streamlined and improved. Computer labs are kept open till late for student use, which is good.

Independent Study

- Students are assigned work to do on their own as part of course work with deadlines. This type of 'independent work' seems to be going on well.
- Computer labs, the Internet and the library can facilitate the students to study independently.
- It would have been good to have a student study area in the Department, but the difficulty in arranging this can be understandable in the present context and the space in the building.
- There is no evidence of a course unit in the curriculum to enable a student to engage in an "independent study" on a special topic, with earned credit, under the supervision of a teacher.
- It was noted that the library subscribes to only a very few international journals in areas relevant to the Department due to restrictions in funds.

Examinations

Here examinations and all forms of assessments are discussed.

- It is commendable that a course grade generally considers both the continuous assessments (CA) during the semester and the end of semester exam.
- Special commendation must be made about the quick completion of exam marking and releasing of exam results. Clearly this is a standard that others should follow. It is seen that results and feedback of some CA elements also are given quickly in some courses; this could be done in all courses.
- Examination papers are seemed to be moderated by peers in the Department, Faculty or outside. However, no documentation evidence about consistent practice of paper moderation was found. It would be prudent to introduce a formal procedure to document and record paper moderation process for each exam paper.
- Students seem to be satisfied that they are evaluated fairly and equally. Further, they appreciate the fact that any student concerns about exam marks can be readily clarified by contacting the relevant staff.
- The administration and conduct of examinations and release of results under the Assistant Registrar of the Faculty is seen as an effective delegation of responsibility to the Faculty.
- Evaluations of the training component and the training report by the Training Engineer's office of the Faculty is observed as effective and conducted well.

Projects

- This is an area where improvements should be made.
- It is commendable that the Department is getting support from the industry to improve physical facilities for student projects; yet, the current facilities seem inadequate for the current student body.
- Quality of the student projects seem average or not up to the expectations. It was specially noted that students do not get adequate guidance and coordination to successfully conduct their final year projects. "Literature survey" and "research papers" were unfamiliar words to the students. Students do not seem to know the requirements and detail marks breakdown of the final year project.
- Students should be better coached on expressing their ideas and explaining their projects. Looking at the student project reports and their presentations, it is felt that improvements must be made.
- It is noted that one academic staff member had more than 10 projects to supervise while there were others with much fewer or none. A single staff member should not be overloaded to supervise many projects as he/she will not have adequate time to provide guidance and to monitor; as a result the quality of projects and student achievement can suffer.
- It may be worthwhile to introduce "project work" in other course units or introduce an individual project course unit in the third year. Then the final year project can be made a group-based project so that students will also learn to work as a team which is what they will be doing in the industry.
- The "social project" which gives credit for doing a project outside the University and in a community is a commendable idea.

Attendance Criterion

- Student attendance seems good in lectures and labs. This could be very much due to enforcement of the 80% attendance requirement, which is a suitable approach.
- Visit by staff to the training places and the subsequent evaluations can be considered effective mechanisms to improve attendance during student training.

It is the view of the Review Team that the Teaching Learning and Assessment Methods can be judged GOOD

4.3 Quality of Students including Student Progress and Achievements

Quality of both the incoming students to the Department and of the completing students appear good in general.

Quality of Students at Entry Level

- Considering the quality of the Advanced Level (A/L) qualified students coming into the Faculty, the Department appears to get some of the best students after the first year. The Department seems to be the second most popular among students when the field selection is done at the end of the first year.
- As a Faculty, it is prudent to improve the quality of the incoming students after A/Ls.
- The GPA of the students at the end of the first year seeking admission to the Department is generally high and has been increasing in the recent years, which is a good sign. The Department should at least try to maintain this trend (if not possible to improve and be the most sought-after Department in the Faculty). The challenge will be how to do this with increased intake of students and the limited available resources. It is prudent to improve the Departmental resources to attract the best students into the Department and to produce good quality graduates.

Progression and Completion

- The quality of the completing graduates is generally good, with increasing numbers (also more % of students) getting First class and Second Upper Honours in the recent years. But these were with an intake of 40 or less, so that the Department has a challenge to maintain the trend with increased intake of 60 students (increase by 50%) but with resources not that increased.
- The completion/graduation rate has also been excellent in the recent years with almost no cases of failures or non-completions. Again, as stated above, challenges remain for the future.
- The Department appears to take efforts in improving the quality of their graduates both academically and otherwise. Many students seem to get involved in non-academic extra curricular activities and improve their other skills but it is not clear if all students do this. There are many opportunities in the Department, Faculty and the University for students.
- It is noted that communication skills of the students need improvement, when it comes to writing reports and making presentations.

Achievements

- As stated in 4.3.2 above, the academic quality of the completing graduates is generally good, with many achieving First class and Second Upper Honours in the recent years.
- It is noted that there is no special award to recognize the best student (graduand) from the Department at the convocation, while the Faculty has many awards in other disciplines.

The Department should actively look for support and/or sponsorship from the industry to organize an award to encourage students. The Department should also try to organize awards and recognition of student achievements at semesters, in course units, projects and so forth.

- A few achievements in technical and academic work and also non-academic work such as sports and social activities by students in the Department and instances of student recognition were noted. Students should be encouraged to take part and opportunities have to be created.
- As a suggestion, special achievements of alumni can be recognized by the Department to encourage current students as well as all alumni to keep in touch with the Department. Successful alumni can be organized to act as “mentors” for groups of students.

It is the view of the Review Team that the Quality of Students including student progress and achievements can be judged GOOD.

4.4. Extent and use of Student Feedback

There is clear evidence that the student feedback has been obtained in various formal and informal ways in the department as identified below.

- Feedback is obtained using questionnaire at the end of each semester. It is the faculty policy to obtain the feedback sheet at the end of each semester. Although the Review Team has witnessed set of feedback sheets, it has not been collected for all the modules and the respective teachers. Even though it has been stated that the Assistant Registrar’s (AR) office of the faculty is responsible of summarizing the student feedback sheets. However, there is no evidence of action on those feedback sheets so far from the AR’s office.
- The Review Team is pleased with the web-based student feedback system maintained by the department. The students are requested to fill the sheet during the middle of the semester. The system is automated to make the summary of the feedback sheets and forward to the respective teachers. In addition the teachers and the Head of the department have the access to all individual feedback sheets for further clarifications. However, it has been noticed that only around 60% of the students are responding to the web-based student feedback. Although students have stated that follow-up action has been taken by the individual staff members most of the time based on the feed back, there are no formal records of such action.
- It has been stated by the students and the staff members that the staff-student meetings help the staff members to obtain the student feedback. However, minutes of meetings have not been maintained for verifications.
- The Review Team is happy to see the existing forum based discussions and private discussions between staff and students through the Course Management System (CMS). These platforms allow the students to give their feedbacks directly to the teachers.
- It has been stated by the students that the meeting hours maintained by the staff members have helped them to meet the staff members and convey their feedback. However, except one staff member, others have not displayed the student-staff meeting hours. It would be helpful for students and staff members if every staff member displays his/her meeting hours.
- It is observed that there is no formal method of obtaining feedback from alumni. Implementing a web based feedback system to collect the feedback from the alumni may

help to update the curriculum in regular basis while strengthening the alumni-department relationships.

It is the view of the Review Team that the Extent and Use of Student Feed back can be judged as GOOD.

4.5. Postgraduate Studies

Postgraduate Programs

The department is not offering any postgraduate programmes at the moment. However, staff members of the department are presently participating in the postgraduate teaching activities of the department of Electrical and Electronic Engineering (EEE).

The department is a relatively young department with a few senior staff members. Consequently it may be a reason for not having a postgraduate programme at the moment. The department has said it has a plan to start a postgraduate programme jointly with the department of EEE. However, the Review Team was unable to notice any sign of plans to commence a postgraduate studies in the department, or to attract students for postgraduate research degrees in the near future though There is no documental evidence for their claim except it is stated in their corporate plan.

It is also necessary to start a postgraduate courses in order to attract and retain qualified staff members in the Department since it not only promotes the quality of research of the department but also provides extra benefits to the staff members such as publications and financial gains.

Research Programs

Two students who registered for their M.Phil. degrees in Year 2002 have obtained their degrees in Year 2007 and 2008. Other two students who have registered for their M.Phil. in recent years seem to be no longer continuing their research in the department. Also no mechanism for the progress review of research students seem to be in place, though there are initial discussions in the Faculty on this matter. Therefore, it is recommended to expedite the development a regular monitoring mechanism of the research students.

It is the view of the Review Team that the Post-Graduate Programme can be judged UNSATISFACTORY.

4.6. Peer Observations

A peer review process is in place for each staff member in each semester based on the guidelines developed by the Faculty Quality Assurance Cell. In this peer review process, staff members select their own reviewers (preferably two) from the academic staff members of the department. The review is based on the observation of one lecture class by the reviewers. The reviewers fill out the form during the review process. Subsequently, the reviewers and the respective teacher casually meet to discuss the review and reach an agreement as to what amendments are necessary to improve the teaching quality. Review Team was provided the peer review forms collected in Year 2006, 2007 and 2008. However, there is no formal record for the reviewers-teacher meetings and the agreement or amendments made during their discussions. Also the lecturers are peer reviewed by different of reviewers in different years except some occasions and it may be due to the unavailability

of the same reviewers. However, except one review form, teachers' skills and improvements compared to the previous review was not pointed out in the review forms. Therefore, the Review Team is of the opinion that maintaining a reviewers-teacher meeting records would help even new reviewers to comment on the improvements.

The Review Team is glad to know that the examination papers have been sent to the external moderators for moderation. Even though, few moderators have not responded, many of them have responded with their valuable comments. All the e-mails from the moderators regarding the review were maintained as a record in the department.

Although it was said that all the examination papers are moderated locally, no records were maintained in the department. Even the records of moderated papers with the moderator's comments were not available with the department or individual staff members except two found in a self maintained file of a staff member. Therefore, it is suggested to take a Faculty decision to use a standard form for the moderator's comments as a common practice and maintain the records of those forms in the department.

It is also noticed that the marked papers were sent for foreign evaluators for their comments until Year 2002. It is not in practice since the department has moved to a semester based system.

It is the view of the Review Team that the Peer Observation can be judged as GOOD.

4.7. Skills Development

It is commendable that the department conducts voluntary courses on C Programming, Linux and Computer Hardware and PC trouble shooting. The students actively take part in ACES society and Gravel Club. The six month internship programmes now offered also provide an opportunity for the students to be mentored and gain technical experience. The team observed that some of the course units such as Operating Systems have mini projects and a presentation as a part of assessment process. It is commendable that a social project is available for the students as a part of the curriculum. It was noted that the students have actively participated in some of the sports such as Volleyball and Carom.

It is the view of the Review Team that the Skills Development can be judged as GOOD.

4.8. Academic Guidance and Counseling

It is commendable that three of the faculty student counsellors are from the department of Computer Engineering. In addition to the support provided by the three student counsellors, most of the academic staff members provide academic guidance and counselling on an informal basis. However the team did not find evidence of a formal academic coordinator for the department. There was no evidence that the students of the Computer Engineering department make use of the services University's Career Guidance Unit. The students indicated the need for an enhanced career orientation programme before the second year of the undergraduates programmes.

It is the view of the Review Team that Academic Guidance and counseling can be judged as GOOD.

Based on the observations made during the visit by the review team and the discussion above, 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	Good
Postgraduate Studies	Unsatisfactory
Peer Observation	Good
Skills Development	Good
Academic Guidance and Counseling	Good

5. CONCLUSIONS

The following section highlights the strengths and weakness observed by the review team under each aspect under review.

1. Curriculum Design, Content and Review

Strengths / Good Practices.

- Curriculum has been reviewed and revised in a timely manner (3 years after introduction)

Weaknesses:

- Lack of components in the curriculum to encourage students in independent learning and research
- Lack of opportunities for specialization, considering today's employment trends and the need to compete with graduates from other private and public sector educational institutes.

2. Teaching, Learning and Assessment Methods

Strengths / Good practices

- Staff commitment and dedication; resources and infrastructure of the Faculty of Engineering in general and the Department of Electrical and Electronic Engineering in particular; the use of the CMS; quick evaluation and feedback of student assignments and end of semester exams; student confidence in evaluations and staff; contribution from training engineer's office; "social project" undertaken by students; student attendance in labs and lectures; staff visits to student training places.

Weaknesses:

- Resources in the Department to meet the current and future needs (human resources, space, labs and equipment, library); facilities for independent study by students; exam

paper moderation process; student projects – supervision and quality; communication skills of students (writing and presentation); research skills of students.

- Lack of relevant current international journals or access to such

3. Quality of Students, including Student Progress and Achievement

Strengths / Good Practices

- Good quality incoming student body; popularity among students in selecting the field after the first year; quality of the outgoing students; excellent completion rates (no failures or incomplete students); some achievements by students in non-academic activities (sports, cultural).

Weaknesses:

- Recognition of student achievements (e.g., no awards to recognize academic performance); communication skills of students.
- Slight decline in the intake quality (Z score) over the past few years
- Lack of participation in student societies such as IET, IEEE and interaction with other Departments

4. Extent and Use of Student Feedback

Strengths/ Good Practices

- Implementation of web-based student feedback system by the department.
- Staff-students meetings to get the student feedback.
- Practising forum based discussions and private discussions between staff and students through Course Management System (CMS).
- Student meeting hours maintained by the staff members.

Weaknesses:

- No action on hard copy of questionnaire collected.
- Absence of feedback from alumni.

5. Postgraduate Studies

Strengths / Good Practices

- Department staff members are participating in the postgraduate teaching activities of the department of Electrical and Electronics Engineering Department.

Weaknesses:

- No postgraduate courses at the moment, and no plans to start in near future.
- Students taking a long time to complete or discontinuing their M.Phil. studies in the recent past.
- Absence of proper progress monitoring system of the research students.

6. Peer Observation

Strengths / Good Practices

- A peer review process is in place.
- Getting exam papers moderated from foreign moderators.

Weaknesses:

- No formal records on local moderation process or reviewers-teacher meetings.

7. Skills Development

Strengths / Good Practices

- Department offers optional voluntary skill development courses such as PC trouble shooting during vacation.
- The department encourages the students in extra curricular activities such as ACES, Gravel Club.

8. Academic Guidance and Counseling

Strengths / Good Practices

- The academic staff members provide academic guidance and counselling on an informal basis.
- The review team observed that the Carer Guidance and Industrial Placement Unit of the faculty scrutinises and offer assistance to the students in compiling the reports on internships.

Weaknesses:

- A formal academic coordinator was not appointed for the department.
- There was no evidence that the students of the department make use of the services of the University's Career Guidance Unit.
- A record of academic guidance and counselling was not maintained within the department.
- The team find evidence that the Career Guidance and Industrial Placement Unit of the Faculty provides Career Guidance programmes to the students.

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	Good
Postgraduate Studies	Unsatisfactory
Peer Observation	Good
Skills Development	Good
Academic Guidance and Counseling	Good

6. RECOMMENDATIONS

The review team was highly impressed by the commitment, dedication the department of Computer Science and Engineering has showed in conducting their Degree program. It is commendable that some of the academic staff members offers a high degree of assistance to student learning environment.

Based on the findings indicated above the review team wish to make the following specific recommendations:

- Monthly departmental meetings could be formalised to improve the planning and operational activities.
- It is recommend that the process of starting the post graduate programmes be expedited.
- Career guidance and counselling could be improved.
- Recruitment of dedicated staff to maintain the computer laboratories would allow academic staff members concentrate on teaching and research activities.
- An academic coordinator could be formally appointed.

7. ANNEXES

Annex 1. AGENDA FOR THE REVIEW VISIT

Day 1: Tuesday, 10th February 2009		Venue/ Person in charge
08.00 – 09.00	Private meeting of review panel with QAA	Department Seminar Room

	council representatives	
09.00 – 09.30	Meeting with the Vice Chancellor, Dean and the Head of the Department	VC's office / Dr. Sandirigama
09.30 - 10.00	Discuss the Agenda of the visit (working tea)	Department Seminar Room
10.00 – 11.00	Department presentation on the Self Evaluation Report (SER)	Department Seminar Room
11.00 – 12.00	Discussion based on the SER presentation	Department Seminar Room
12.00 – 13.00	Lunch	SCR / Dr. Sandirigama
13.00 - 14.00	Meeting with Academic Staff	Department Seminar Room
14.00 – 15.30	Observing Departmental facilities (IFS lab opening)	CE Building/ Dr. Sandirigama
15.30 – 16.00	Observing other facilities	EEE labs / Mr. Rajitha Navarathna
16.00 - 16.30	Observing Teaching - Practical Class	CO252 (CE Lab, Top Floor) / Mr. Anushka Rajapaksha
16.30 – 17.00	Meeting with Technical & Non-academic staff	Department Seminar Room
17.00 – 18.00	Meeting with undergraduate students (2nd, 3rd & final years)	Department Seminar Room
18.00 - 18.30	Brief meeting of reviewers	Department Seminar Room
Day 2: Wednesday, 11th February 2009		
09.00-09.30	Observing Teaching	CO317 (Lecture Room #2)/ Dr. Sandirigama
09.30 – 10.00	Observing Teaching	CO214 (Lecture Room #11)/ Dr. Ragel
10.00 – 11.30	Observing Documents (working tea)	Department Seminar Room
11.30 – 12.00	Meeting with undergraduate students (final years)	Department Seminar Room
12.00 – 13.00	Lunch	SCR / Dr. Sandirigama
13.00 – 13.30	Observing Teaching	CO541 (Seminar Room #2)/ Dr. Dewasurendra
13.30 - 14.00	Observing other facilities	Mechanical Engineering Lab/ Dr. Radhakrishnan
14.00 – 14.30	Observing other facilities	IT CGU/ Dr. Sandirigama
14.30 – 15.00	Student Presentations (Final Year Project + OS Presentation) + Tea	Department Seminar Room
15.00 – 15.30	Observing other facilities	Engineering Library / Dr. Dewasurendra
15.30 – 16.30	Observing other facilities	IT Centre, Physical Education Unit / Mr. Chanaka Munasinghe
16.30 – 17.00	Meeting of Reviewers	Department Seminar Room

Day 3: Thursday, 12th February 2009		
09.00 – 09.30	Observing practical session	CO315 (Interfacing lab, Ground floor)/ Mr. Akalanka Mailewa
09.30 – 10.00	Meeting student counsellors/academic advisors	Department Seminar

		Room
10.00 – 11.00	Reviewers private discussion (working tea)	Department Seminar Room
11.00 – 12.00	Meeting with the head and staff for reporting	Department Seminar Room
12.00 – 13.00	Lunch	SCR/ Dr. Sandirigama
13.00 – 17.00	Report writing	Department Seminar Room

Annex 2. LIST OF DOCUMENTS OBSERVED

1) General

- Faculty Hand Book
- Statistical Hand Book of University of Peradeniya
- University Calendar
- Statistics of Universities in Sri Lanka
- Staff meeting minutes
- Faculty board and Senate minutes

2) Curriculum Design, Content and Review

- Syllabus Revision
- Curriculum
- Recent Revision
- Performance Criteria

3) Teaching, Learning and Assessment methods

a) Student Reports

- i) Project Reports
- ii) Social Project Reports

b) Past Papers

- i) 1st year
- ii) 2nd year
- iii) 3rd year
- iv) 4th year

c) Course Documents

- i) In the CMS
- d) List of Examiners and moderators
- e) Semester Time table
- f) Student Attendance

4) Quality of Students including Student Progress and Achievements

- a) Student streaming (E/06)
- b) Grade reports
- c) Student achievements – papers published from the projects

5) The Extent and Use of Student Feedback, Qualitative and Quantitative

- a) Student Feedback
 - i) Paper based

- ii) Online
 - Administered Student Feedback from CMS
 - b) Forum Discussions
 - c) Staff student meeting minutes

- 6) Postgraduate Studies
 - a) Completed MPhils
 - b) Academic Staff teaching in other MSc Programs
 - i) Department of EEE
 - ii) PGIS

- 7) Peer Observations
 - a) Peer Review
 - b) External Examiners
 - c) Internal Moderators
 - i) Exam paper Moderation
 - ii) Analyzing results

- 8) Skills Development
 - a) Documentation of Industrial Training
 - i) Industrial training reports
 - ii) Training inspection report
 - iii) Information regarding training places
 - b) Orientation Program
 - c) Curriculum of Non-technical subjects
 - d) Knowledge/Skill Sharing sessions by ACES
 - e) Knowledge/skill enhancement seminars and workshop conducted by different societies

- 9) Academic Guidance and Counseling
 - a) Academic Advisors
 - i) List of Advisors
 - ii) Course Registration and Add/Drop
 - iii) Grade Reporting
 - b) List of Senior Student Counsellors