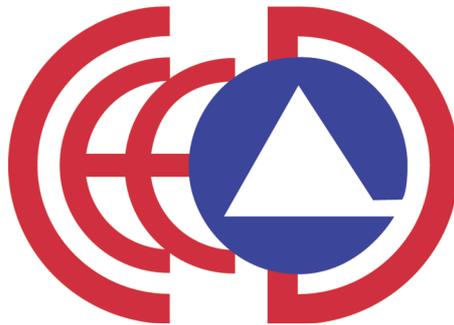


The University of Western Australia



CEED Project Manual for Client Mentors



Co-operative Education for Enterprise Development

This manual is produced for the use of Client Mentors supporting projects under the Co-operative Education for Enterprise Development (CEED) program at the University of Western Australia. Separate manuals are produced for Students and the Academic Supervisors of CEED projects

First published 1992 Last revised January 2009

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1. Executive Summary

➤ This alerts you to the main issues you will need to deal with in handling your CEED project.

Introduction

CEED projects are joint research projects that take advantage of the resources of your organisation with the research facilities and expertise of the University of Western Australia (UWA). The principal aim of CEED projects is to benefit Client organisations and simultaneously enhance student training by addressing an issue (or issues) of interest. CEED projects need to produce results useful to your organisation and meet the academic requirements of the units or degree being undertaken by the student.

Structure of CEED projects

CEED projects are based on conventional academic student projects, such as Final Year projects (in Engineering degrees), Honours projects, Masters thesis projects, and PhD thesis projects. At an early stage, students work with you and their academic supervisor to agree on the “project brief”, which will define the objectives and deliverables to be achieved by the project, and the mechanisms for managing the progress of the project. In most CEED projects, the student will spend a period of time working on their project at the Client’s premises.

Pitfalls to Note

Poorly defined, inappropriate, or changing targets can severely limit the effectiveness of projects. Certain project stages need to be carefully managed to avoid prolonged “flat spots”, most notably the period where the student resumes academic studies after a period of site work.

Communication problems invariably inhibit project performance. Communication lines between the participants need to be continuously monitored.

Mentors are encouraged to contact the CEED Office early with any concerns regarding the progress of the project.

Project Supervision

The academic Supervisor holds the main responsibility for oversight of the project. Apart from yourself as Mentor and your Deputy Mentor, the Deputy academic Supervisor and CEED Office are available to help.

Student Assessment

Your input is largely informal, but you are encouraged to pass on your views to the academic Supervisor. The academic supervisor may include that input in the Supervisor’s Report that they submit to the students’ examiners.



Communication

We emphasize the importance of communications in the training of our students. Please encourage them by insisting on a high standard of reporting, including regular written progress reports. Please contact the CEED Office early if you have any concerns or personnel changes that may affect communication lines.

Getting Started

Proper planning early in the project is vital. Early goals for students starting their project are identified, together with a checklist of important matters to clear up with you.

Defining project outcomes

The project's *outcomes* are the benefits which your organisation wishes to derive as a result of the CEED project's successful completion. Clear project outcomes need to be identified, and all parties must be satisfied that they meet academic criteria as well as your organisation's needs. The Academic Supervisor may need to discuss with you extra outcomes to meet the academic requirements of the units or degree being completed by the student.

The Project Brief

The "Project Brief" is produced by the Student in consultation with you, the academic Supervisor and the CEED office. Once agreed, it is signed by all four parties. It defines project outcomes, how they are to be approached, who will arrange for required resources, and other important issues.

CEED Project Presentations

Students make several presentations during the course of their CEED project. One of the most important will be at the CEED seminar and dinner, to which you will be invited.

Project Expenses

This outlines the financial basis of your project and suggests methods of handling financial matters including: CEED fees, student expenses, travel expenses and other expenditure.

Studentship

CEED students receive a studentship unless they have other financial relationships with your organisation. If you want the studentship increased, please contact the CEED Office.

Site work

Students spend a period working full time on their project at your premises. They are neither "vacation students" nor employees; however, up to 15% of time on site may be allocated for other useful experience. The basic period can be extended by mutual agreement, with or without remuneration. Any periods of employment should be agreed in writing for insurance purposes.



Insurance and Safety

Insurance provisions are outlined in the CEED Standard Project Agreement. Briefly, your organisation and the university indemnify each other against various situations, and the university also provides students with limited insurance cover. If you provide additional employment for the students for any period during the project, please agree in writing (in advance) about the dates to avoid later disputes about insurance.

Students need to receive training on site safety; otherwise their lack of experience could lead to dangerous situations. Please be sure to arrange this early.

Agreements

CEED projects are carried out under a CEED Standard Project Agreement, which is available at www.ceed.uwa.edu.au. It outlines responsibilities of the parties, and the options for handling intellectual property. The default arrangement is ownership of IP in equal shares by the university and CEED Partner, though CEED Clients may opt for 100% ownership of project intellectual property (attracting increased project fees). Any change in the preferred option must be finalised within 30 days of the student being appointed.



2. Introduction

- **Your CEED project should benefit all parties involved**
- **Please read the Executive Summary before starting your project**

Welcome to the CEED Program! We trust you will find the role of Mentor for your CEED project a stimulating and fruitful experience. Your role is crucial for the success of the project, because your guidance and direction will enable the efforts of the project team (student(s), academic supervisors and yourself) to bring maximum benefit to your organisation.

This manual is designed to assist you as Mentor, and outlines the main features of CEED projects. The executive summary identifies issues that we have found to be important. As specific needs arise, you can find out more about them in the remainder of the manual.

The CEED Office is self-funding and was set up at UWA in 1989 to develop productive, working relationships between the university and organisations like yours. It provides a formal framework to link the project work of senior undergraduate and postgraduate students with your research and recruiting needs.

CEED offers access to all UWA schools for single school or multi-disciplinary projects, and aims to provide you with highly profitable outcomes. When handled effectively, CEED projects can achieve very significant results for your organisation and greatly enhance student training and experiences.

Purpose of CEED projects

CEED Clients often have multiple reasons for undertaking projects. Reasons include:

- improve performance and profitability through progress on the project topic;
- gain access to University equipment and expertise for specific needs;
- start training potential employees before they complete their studies;
- increase the pool of people with experience and expertise in areas important to you;
- improve links with the University for future research and interaction.

Students pursue the project as part of their academic study. CEED projects give them the opportunity to:

- gain professional experience in parallel with their studies, enhancing their attractiveness to future employers;
- work on a problem of immediate concern to the wider community;
- receive a Studentship to assist financially through their studies;
- students undertaking Final Year Engineering or Honours extend the period of their project, increasing the prospects of useful achievement and making it less vulnerable to delays.



The University gains from CEED projects because they:

- increase contact with organisations interested in research;
- enhance training by providing students with professional experience;
- broaden the knowledge and contacts of academic supervisors;
- facilitate projects with broader scope and cross-discipline activity;
- give rapid feedback on training from employers;
- develop fruitful relationships with other organisations.

Requirements of CEED projects

Each CEED project must be tailored to satisfy the needs of your organisation and the students:

- you desire progress on your project topic;
- students need opportunity to demonstrate their academic capabilities.

To achieve both goals, clear objectives must be defined.

The roles of the "team" members for your project are well defined:

1. Students work in a formal research situation

Students carry out their project as part of their academic study, but they are also conducting research for the CEED Partner and must meet their administrative needs, e.g. reporting during and at the end of the project.

2. Academic staff undertake supervision

Academic Supervisors remain responsible for supervising the project, though the Mentor will also have considerable influence on the work.

3. Client Mentors provide guidance and extra input

The Mentor steers and facilitates the project to ensure it meets the CEED Partner's objectives, helping guide the students, and linking them into the CEED Partner organisation.

4. CEED Office monitors and supports project progress

The CEED Office maintains contact with all parties to ensure they are happy with project progress, their working relationships, and the overall operating structure.



3. Structure of CEED Projects

- **CEED projects are carefully structured to ensure the needs of all parties are met. All components are important.**
- **Final Year Engineering and Honours projects have firm guidelines on timing.**

For Final Year Engineering and Honours projects, CEED projects may be extended to as much as 14 months. Under the standard project model, students work on-site for 8 weeks (usually during the summer vacation, though this time may be apportioned over the course of the project to suit the needs of the project. Under the “three-quarter” project model, the student may not formally work on-site (though it would be unusual for the student to not at least visit the client’s site), and may in fact spend the summer vacation working for a different organisation. For Masters and PhD projects, the projects are of normal duration.

Most CEED projects require students to spend one or more periods working full-time on their project at the CEED Partner’s premises. For Final Year Engineering and Honours projects, the most desirable time for students to work on site is during the summer break either before the first semester of the project (for students starting at the end of the year), or between the first and second semesters (for students starting in the middle of the year). The timetable for Final Year Engineering and Honours projects is provided in Table 1 below.

Projects Starting at the End of the Year				
Mar-Sep	Sep-Nov	Dec-Feb	Mar - June	July-Nov
Project Definition and Initiation	Student Interviews and Appointment	Student On-site (Full project); Student on Vacation work (3/4 project)	First semester of Project	Second Semester of Project
Projects Starting in the Middle of the Year				
Oct - Mar	Mar - June	June - Nov	Dec-Feb	Mar-June
Project Definition and Initiation	Student Interviews and Appointment	First semester of Project	Student On-site (Full project); Student on Vacation work (3/4 project)	Second Semester of Project

Table 1 Scheduling of Final Year Engineering and Honours projects.

Stages of Final Year Engineering and Honours CEED projects

Start-up stage

Requirements for the first project weeks are outlined under “Getting Started”. Students need one or more meetings with you and their Supervisors to agree on the *Project Brief* (defining project outcomes and logistical matters), and to prepare for the site work period to ensure it is effective.

Site work period

Students work on their projects at your premises for a pre-determined period of time during their project, depending on the project model being used. For standard projects, the student spends 8 weeks on-site; for “three quarter projects”, this period is agreed between the parties (and the student may even spend no time on site).

The students are not your employees during this period, so university insurance arrangements apply. Longer site periods, and split periods, are permitted where mutually acceptable. Fuller information on this is given under "Arrangements for Site Work".

Academic year (2 semesters)

Students continue their CEED project throughout the academic year. Time available varies with different courses of study, but about 10 hours per week may be regarded as typical. The latter part of the final semester is occupied with writing up theses and any special project reports. You receive one or more copies of the thesis or other project report as agreed in the Project Brief.



4. Pitfalls To Note

- **CEED projects place greater demands than usual on student competence.**
- **While some potential problems are obvious, some are not, so please take careful note of the points below.**

Most potential pitfalls relate to poor planning or poor communication. If not avoided, they reduce the usefulness of the project and burden both the students and the Client Mentors.

Project "flat spots"

Experience has revealed two serious "flat spots" during CEED projects during which students can potentially lose direction or motivation. These are:

1) When students start on site

Without clearly defined objectives and methods of accomplishing them when starting on site, students can flounder in the unfamiliar working environment. Beware! *Some flounder silently*, not wishing to burden you with their inexperience. When they start on site, please make sure your students: have clear goals defined (i.e. Project Brief), know what is expected and where to obtain resources, and have regular meetings with you to monitor progress.

2) When students return to campus

Students can find it hard to cope when study pressures resume after the site period. Having made progress on their project over the summer, there is a *strong temptation to put their project aside "for a short period"* until they get back into their study routine. Delays then grow as study pressures continue, until the prospect of catching up on their project work becomes increasingly daunting. Please try to ensure your students have some easily attained short-term goals to maintain momentum during this critical period.

Informal changes in project direction

Priorities within organisations can change quite rapidly. With CEED, this can lead to subtle (or even strong) pressure on students to adopt revised lines of investigation which threaten the usefulness of the work already done. Revised outcomes need not be a problem, but informal or progressive modification can unsettle students and drastically affect their motivation and performance. All changes to project outcomes should be formally agreed, and documented by modifying and re-signing the Project Brief.

Vague outcomes

Vaguely defined project outcomes can cause disappointment for you and others in your organisation and frustrate Students, leaving them uncertain about what you require.



Please discuss thoroughly with Students and Supervisors the points outlined in the section on “Starting up”, as these help avoid many pitfalls in handling CEED projects.

Poor communication

Irregular or poor communication is probably the most common cause of dissatisfaction in project management. Good communication can be endangered if your students are intimidated by your seniority and experience. Please *insist on students reporting regularly to you*, even if they have little progress to report.

Ignored changes in performance

Students are selected for CEED projects because you and the Supervisors believe they can do a good job, while profiting from the experience themselves. Similarly, academic Supervisors are selected by the CEED Office for their knowledge, competence, and experience. Despite this, situations occasionally arise which result in disappointing performance. Such situations may be unpredictable, but they are often observable through subtle changes in student attitude or performance.

As Mentor, you are well placed to detect such changes. If you perceive deteriorating performance or motivation at any time, please alert the Supervisor or CEED Office immediately. Students are not penalised if intervention is required, and it is far better that remedial action be taken early. Early warning usually allows simple a remedy, so please help us ensure your CEED project is productive by alerting us quickly to any unsatisfactory developments.



5. Project Supervision

- **CEED projects require significant input and guidance from the CEED Client.**
- **This is achieved through you as "Mentor". You effectively act as a co-supervisor.**

CEED projects are still academic projects, but are focused on an identified need of the CEED Client. They receive input from the CEED Client in the form of funding, and additional guidance from the Mentor, whose role as facilitator is also vital.

Academic Supervisor

Academic Supervisors remain responsible for oversight and academic assessment of CEED students' work, and are the primary guides for CEED projects. This responsibility is retained even when the students are working at your premises during the vacation period, even though you as Mentor will be responsible for their supervision from day to day.

Mentor

Your role, as Mentor, is crucial to the success of your CEED project. Your students will learn much about your organisation from you, and their level of enthusiasm and motivation will be greatly influenced by yours.

You are the main contact within your organisation for students and Academic Supervisors, and you contribute to the project in many ways. Some of the more important ones are:

- helping define project objectives, and linking the project with other activities in your organisation;
- arranging for your organisation's resources to be available when needed;
- arranging for students to receive help in areas of your organisation's expertise, whether or not you are the main source;
- encouraging and guiding students as they learn to cope with unfamiliar material, methods of work, and working environment;
- reporting semi-formally on student performance. A brief (confidential) project assessment form may be sent to you by the CEED Office from time to time. Prompt replies would be greatly appreciated;
- providing feedback to the CEED Office on your experience with CEED so we can develop and improve the program.

Students are required to keep you informed of progress at all times. Supervisors are also advised to liaise closely with you. If at any time you feel communication or other project activity is deficient, please make early contact with the Supervisors or the CEED Office (as appropriate) so the problem can be addressed quickly.



CEED Client "Senior Contact"

The CEED Office has listed for your project a "Senior Contact" within your organisation, as well as yourself as Mentor. Generally, this person was involved at the inception of your project, but has subsequently handed over its guidance to you. If you require the students to maintain contact with this person on any matters concerning the project, please ensure this is stated in the Project Brief.

Deputy Mentor

Please nominate a Deputy Mentor as soon as possible in case you become unavailable at any time during the project (eg. leave, sickness, etc.). It is desirable, but not essential, that this person be familiar with the project and its objectives, and able to provide some basic guidance should you be absent for any period. This arrangement has nothing to do with seniority, and the "senior contact" sometimes takes on the Deputy Mentor role.

Deputy Academic Supervisor

Each Academic Supervisor will also have a deputy whom you can contact should the Supervisor be absent for any length of time. If you are unsure who this person is and are unable to contact the Supervisor, the CEED Office should be able to help.



6. Student Assessment

- **Academic assessment of CEED projects remains the responsibility of university schools.**
- **As Mentor, you may be invited to contribute your observations to this assessment.**
- **Your feedback to the CEED Office on all matters is welcome at all times.**

Assessment methods for student projects vary between university schools. CEED projects generally fall into the same category of assessment as their regular equivalents, and the CEED Office is not directly involved in academic assessment or any other academic matter. As Mentor, you may be asked by the Academic Supervisor to contribute your informal assessment of student performance, particularly in terms of attitude and initiative. This assessment may be included in the Supervisor's reports to the students' examiners.

In addition, the CEED Office will ask for your feedback on all aspects of your project after completion. If you wish to provide comment before that time, you are most welcome to do so.



7. Communication

➤ **You can help students by setting, demonstrating, and demanding high standards of communication and presentation of information.**

In their manual, CEED students are reminded that the success of their project hinges on people, and the students' ability to obtain proper input from all parties. Communication is therefore critical and, as Mentor, you are well placed to help your students with this.

Student communication

Students are advised to take all steps to minimise the risk of misunderstanding. Their manual gives further details, but the main points are:

- ✓ Keep in regular contact with all parties;
- ✓ Take notes at all meetings and give copies to those who attended;
- ✓ Put all agreements in writing;
- ✓ Keep all parties well informed at all times.

Please encourage your students to do this. It not only teaches them good habits, but will greatly reduce the risk of miscommunication and make your role easier.

Monthly written progress reports

Students are required to present a brief report at least monthly (throughout all phases of the project, including site work) to you, their Supervisor, and the CEED Office. They have been given an optional “standard” sheet as shown on the next page, though they are welcome to develop an alternative format to suit you.

You may require a longer report at the end of the site work period, if so, please ensure this is clearly specified in the *Project Brief*.

Communication with the CEED Office

The CEED Office is responsible for arranging CEED projects, and monitoring progress to ensure your needs are being met. If you have any concerns, please inform the CEED Office as early as possible - before problems become major.

Changes of Mentor or other contacts

If there are any changes to personnel acting as Mentors, deputies, or other contacts in your organisation, please inform the CEED Office, preferably giving revised phone, fax and email details.



CEED Student Monthly Report

Expenses This Month	
Urgent Issues	

CEED Project Monthly Report		Insert Month
Project No & Title:	Insert Text	
Client	Insert Text	
Student	Insert name	

Project progress this month
Enter Text

Issues affecting progress
Enter Text

Expected progress next month
Enter Text

Issues that may affect progress next month
Enter Text



Expenses incurred this month
\$

Total expenses incurred during the project to date
\$

Itemised list of expenses incurred this month
<p>In this box, provide an itemized list of all project expenses incurred during the month, stating the amount of each item and the reason for the expense.</p> <p>If expenses have been occurred</p> <ul style="list-style-type: none"> • attach copies of all receipts • attach a copy of the written authorization from the client covering the expenditure. <p>If no expenses have been incurred this month, simply enter “No expenses incurred this month” in this box.</p>

Signed	Date

Recipient List

- Academic Supervisor
- Client Mentor
- CEED Office (ceed@uwa.edu.au)
- Self



8. Getting Started

- **Early stages of project period cover essential planning.**
- **Careful planning is needed to ensure students optimize the use of their time on site.**
- **Initial meetings between you, Students and Supervisors are vital for getting the project properly defined.**
- **Written objectives are needed to ensure all parties know what is intended and how it is to be achieved.**

Ideally, a reasonable amount of time is allowed for early planning and preparation stages but, depending on when students are appointed, this may not be available. If your project started late, these processes need to be accelerated accordingly.

The first few weeks are a crucial period for the project. How well they are used will affect its success. One or two meetings will be needed with the Students and Supervisor (probably on site) to determine and define the key features of the project.

You will be able to discuss and clarify what can be achieved with your project, and you can explain what is desired. The students will be aiming to:

- define the existing situation as it affects your project,
- define the final situation you desire at the end of the project,
- define the problem to be handled and its boundaries,

We encourage students to keep a record of all ideas considered because they may become significant later. Factors "eliminated" can still play a role in defining the project problem, even though they may not be directly related.

Key targets for students during the first project weeks are to:

- produce a Project Brief which includes your reasons for requesting the project, required outcomes, methodology, milestones, constraints, resources and deliverables;
- identify and address topics which may require extra study;
- arrange with you and their Supervisors for needed resources to be made available.

Before starting on site (unless the project is starting late), students generally should have:

- consultatively developed the first draft of their "Project Brief" and issued it for comment by Mentor, Academic Supervisor and CEED office;
- accumulated some reference material;
- started building up key skills for handling the project.

If the project is starting late (at or after the end of semester), the above may not be possible, but it is highly desirable that the Project Brief be signed within the first weeks of site work. The longer it is delayed, the greater the likelihood of problems later.



Early team meetings

CEED project work at Final Year Engineering or Honours level ideally starts in the semester prior to the students' Honours year (i.e. October, or May for mid-year entry), though it is sometimes (often) later than this.

The start-up phase includes the following:

- **opening communication channels** between you, the Students and Supervisor;
- **arranging team meetings** to set goals and establish proper working links;

Check list for the initial team meeting

Students are given a list of questions to ask at your first formal meeting to ensure a number of important issues are not overlooked. Please encourage them to go through the list thoroughly so they can gain confidence in dealing with you. For your information, the matters that specifically need to be raised are:

- what do you, as Mentor, (and other key players within your organisation) see to be the project's main outcomes – that is, the main way you wish to benefit from the research project?
- what would you like to have as the *primary* and *secondary* outcomes for your project?

Note: Outcomes may be adjusted as the project progresses, provided it is done in writing and signed by you, the Academic Supervisor, and the Student. Please note, the project will need adequate academic hurdles (deliberately inserted if necessary) for Students to demonstrate their academic prowess.

- in what form do you want the project outcomes (e.g. report, software, working item, etc.);
- what would be suitable “milestones” for the project (please do not impose commercial deadlines because students have overriding course deadlines with examinations and other assignments)?;
- what constraints (if any) does your organisation need to impose on the project approach (eg. to fit other activities, standards, products or policies)?
- what sort of resources do you think may be needed? Does your organisation already have access to these?
- what resources (eg. labs and equipment) do you hope UWA can provide for the project?
- how will the project be handled if particular resources are not available when needed?
- will any equipment or other items need to be ordered specially for the project? If so, is information needed? By when? Who will order them?
- will special test rigs be needed? Where will they be built?
- is there information you need urgently from the students for budgeting purposes?
- what mechanisms will be used to obtain approval on any project expenditure?;
- which of your personnel have an interest in the project outcome, or expertise relevant to the project?



- agree on communication channels and frequency of student reports (normally monthly). What days and times are good (or bad) for making contact with you?
- who will act as a Deputy Mentor if you are unavailable for any length of time?
- when can the students and Supervisor go to site to familiarise themselves with the project's working environment?
- are there any special requirements for the vacation work (eg. medicals, safety inductions, special clothing)?
- agree on duration and dates of vacation project work. Some students may like to spend more than the normal 8 weeks. (Any agreed extension can be spent on the project, or as an employee performing other activities. The tax-free studentship may be increased if you so desire, although there is no obligation, but any increase may not be in exchange for work.)
- will your Human Resources Department need to be involved? If so, how should the student make contact?

Extra information you may like to get from Academic Supervisors

- identify what expertise the Supervisors (and academic colleagues) can and cannot contribute;
- identify alternative sources of expertise at UWA if necessary;
- identify and provide contact details of the Supervisors' academic "deputies" in case of absence.



9. Defining Project Outcomes

- **Firm project outcomes must be identified and all parties satisfied that they meet academic criteria and your organisation's needs.**
- **The Supervisor might need to suggest adapting or enhancing outcomes (in consultation with you) to achieve this.**

Establishing clear outcomes for CEED projects is essential. This process is not always simple because you may not yet be aware how much can be achieved with a CEED project. The Supervisor can advise you, so a better understanding should soon emerge. Firm project outcomes form an important part of the Project Brief (see later section).

It is highly desirable to define a range of outcomes, with varying priorities. If this is done properly at the outset, it makes it easy for outcomes to be evaluated and adjusted as the project progresses, especially if it becomes apparent that certain outcomes can or cannot be achieved.

Most project topics naturally contain ample demands for academic excellence; but some may not. In such cases, supervisors may need to suggest additional material to meet academic requirements. Students and supervisors are encouraged by the CEED Office to draft several options so you (as Mentor) can select or tailor one to provide maximum benefit to your organisation.

The *Project Brief* is where project outcomes (among other things) are documented. If project outcomes need to be changed for any reason, the Project Brief should be updated and re-signed.



10. The Project Brief

- **The situation with CEED projects is unique, so deliberate planning of goals and processes is essential.**
- **CEED projects place greater demands upon students' planning skills than regular projects.**
- **The Project Brief is vital to ensure all parties agree on what is to be done, how it is to be approached, and how team members are to interact.**

There is no obvious parallel to the processes and interactions involved in a CEED project. This means that many logistical issues need to be addressed specifically to ensure the project proceeds smoothly.

During the first weeks of the project, students must produce a "Project Brief" defining their projects, the desired list of outcomes and how they plan to handle it. The Brief also describes your organisation's current situation as it relates to the project, what you want delivered to you at the end of the project, and identifies interfaces with other parties, especially those who supply approvals, resources, finance, or other important information.

The key to developing the Project Brief is one or more face-to-face discussions between you, the students and their Supervisors. A visit to site is also helpful. A draft Project Brief is produced which is presented to you, the Academic Supervisor and CEED Office for comment. Once all parties are satisfied, it is signed off by all. Students are given detailed instructions on how to go about writing up the Project Brief. The chapter "Project Brief" from the CEED Project Manual for Students is enclosed at the back of this manual for your information. A pro-forma Brief can be downloaded from the CEED website.

Should requirements change significantly during the course of the project, the Project Brief needs to be modified and re-signed by all parties. This avoids painful debate later as to what the Students were supposed to be achieving.

Students will need encouragement and guidance to develop a good approach to planning their project. Your attitude will influence them, so please make sure you demonstrate enthusiasm for the project.



11. CEED Project Presentations

- **Apart from any school talks, students generally present one or two informal project talks to CEED colleagues.**
- **All students will give a verbal or poster presentation at the formal CEED Seminar held in early October each year.**

Presentations organised by the CEED Office are independent of those organised by academic schools. As Mentor, you are welcome to attend any of them, even the informal talks, though not many Mentors choose to attend our informal sessions.

Papers associated with student presentations

Whenever students are giving formal presentations on their project (for CEED or the relevant School), you will be asked to check their papers, and confirm that they do not contain confidential or other commercially sensitive material. If the student is on schedule, you should have over a week to do this. Sadly, students are sometimes late in submitting their drafts for approval. If that happens, we ask that you try to meet the printing deadline if at all possible, otherwise your student's paper will not be included in the published proceedings.

CEED seminar and dinner

During the semester break of the second semester each year (usually mid September), a formal seminar is arranged with Mentors and other people from CEED Clients invited to hear CEED students give presentations on their projects. Students finishing their project that semester will deliver oral presentations; students starting their project will provide a poster presentation. Proceedings, with papers submitted by all CEED students, will be published and presented to delegates.

You will be invited specifically to this seminar during your project. Where timing permits, you may also receive an invitation to the event for the preceding year's students because it will help you determine what to expect from your project.

The purpose of this seminar is to demonstrate what can be achieved with CEED projects, foster better contacts, and generate further ideas for research projects through CEED. The seminar will be followed by a dinner to allow you to mingle with CEED students, Supervisors, and other guests.



12. Project Expenses

- **CEED projects have significant financial transactions, so students must learn proper handling of paperwork.**
- **Certain approaches minimise workload and risk. Methods shown below are useful if your project will incur additional expenditure.**

Funding of CEED projects

CEED projects are joint research projects with contributions from all parties. Your organisation has agreed to pay the additional expenses for your CEED project, provided approval is obtained by the student or university *before* incurring it. Please ensure your students receive signed, written approval from you (or other authorised person) before they are required to incur any expenditure.

Should you need the university to expend money on the project, our normal methods of dealing with it are given below. Equivalent information is given in the Student's and Academic Supervisor's manual so all parties know the suggested procedures. Students undertake financial management of their projects under their Supervisors' oversight and in conjunction with you. Students should consult their Supervisor before proposing any new expenditure to you. Your organisation's funds need to be handled properly, so we also require expenditure incurred through the university to be approved by the Academic Supervisor.

CEED program fees

As part of the cost sharing, your organisation pays fees to the university. These are invoiced shortly after the students are appointed, and (for Final Year Engineering and Honours level projects) at the completion of the project. Postgraduate level projects are generally invoiced twice yearly.

If you require an order number to be quoted on invoices, please send your order to the CEED Office, otherwise invoices will simply refer the account to you.

Sum for minor student expenses

The project fee includes a small sum from which students can recover incidental project expenses like photocopying without generating excessive paperwork. Claims need to be submitted by the students to the CEED Office, verified by their Supervisor, giving account of the expenditure. This sum is *not* for transport costs, which tend to be a sensitive issue with many CEED Clients (see below).

The above sum can be increased at any time with your written consent. Increases will be treated the same way as other project expenditure. The initial sum is to demonstrate to students the need to account for all expenditure, and to provide a simple and convenient mechanism for meeting minor student expenses.



Travel expenses

Under the standard project agreement, CEED Clients agree to reimburse the university and students only for travel outside the Perth metropolitan area, provided you have agreed to it in writing.

If you want student transport claims to be handled through the university, special arrangements confirmed by you in writing are essential. Should you decide to reimburse students for travel *within* the metropolitan area, this will need to be confirmed in writing if you want the university to process the claims.

General approach to expenditure

As a general principle with CEED projects, if you require the university to spend money on the project on your behalf:

1. prior written authorisation from you is essential;
2. schools will handle payments from their own accounts as the job progresses. Claims for reimbursement will be made through the CEED Office;
4. when the job is complete, the CEED Office will invoice you and, when the account is met, arrange for the university school to be reimbursed. Where expenditure is large progress payments may be sought.

Specific procedures for expenditure

If your project incurs extra expenses, you can arrange to handle it in one of three ways:

1. Work by university or others on "fixed price"

Students can obtain "fixed price" quotations from school providers (or other contractors) for goods and services, and obtain written approval from you to proceed. The university school then places orders under its regular accounting system. The CEED office will arrange for you to be invoiced and reimburse the university school.

2. Work by university on "time and materials" basis

This is sometimes convenient, but can be administratively messy. Students must obtain written approval from you for expenditure on a "time and materials" basis up to an agreed price limit. Students (through their Supervisors) then arrange to buy the items and have technician time logged and charged to the project. All expenditure (including use of stock materials) is recorded against the project. When the job is complete, the CEED office will invoice you and reimburse the university school. For your information only, a project expense sheet (to be completed as necessary by students) is shown on the next page.

3. Incur expenditure through your organisation

As Mentor, you obtain the required goods and services through your organisation's normal channels. This approach requires the least involvement of students and university accounting systems. If you want students to maintain records of such costs, please make sure the requirement is included in the Project Brief.





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RECOVERABLE PROJECT EXPENSES

CEED Proj Ref: _____ School: _____

CEED Partner: _____ Supervisor: _____

Mentor letter ref/date _____ approves the expenditure below

Approved by Supervisor/School: _____ Date: _____

Qty	Description	GST excl.	GST	GST incl.
TOTAL		\$	\$	\$

Students: Please give your school accounts officer a completed copy of this sheet with other documentation when requesting project expenditure to be recovered from the CEED Partner.

School accounts officer: Please *do not process the above expenditure without confirmation of written approval by the CEED Partner*. When the above expenses have been incurred by your school, please forward a signed copy of this sheet to the CEED office. We will invoice the Research Partner and reimburse you. If you have any queries, please call us on 6488 3130.

I confirm the above expenses have been incurred by this school on the nominated CEED project.
Please reimburse account number _____

Signed: _____ Date: _____
School Accounts Officer



13. Studentship

- **Most CEED students receive a tax-exempt Studentship paid by the university on behalf of the CEED Partner.**
- **If students have other financial arrangements with the CEED Partner, the studentship arrangements will change.**
- **The studentship sum can be increased if desired.**

CEED students who have no other special relationship with your organisation (e.g. cadetship) generally have a uniform arrangement for their Studentship and vacation work. Those with scholarships or cadetships from your organisation usually have different financial arrangements.

Studentship details

Each student receives a tax free Studentship (through the CEED Office) over the full term of the project. A standard sum for this is already included in the CEED project fee paid by you, but we can arrange for a larger sum if required; please contact the CEED Office as early as possible if you wish to have the Studentship value increased. Studentships are paid to the students by the university early each semester.

For Final Year Engineering and Honours level students there are three instalments:

1. Upon submission to the CEED Office of a Project Brief signed by all parties;
2. Upon commencement of the second semester of the project
3. Upon completion of the project, defined as when the Client provides documentation that all deliverables have been received.

Cheques for Studentships are collected from the CEED Office once notified by email to do so. *It is the students' responsibility to check their email.* If you have any queries regarding the Studentship, please contact the CEED Office.

Students with a scholarship or cadetship

Students with a separate scholarship or cadetship from your organisation usually already receive more financial support than is offered with the CEED Studentship. As a rule, the mechanism providing the greater support to the student is used for the CEED project, *but not both*. Invoices covering CEED fees and Studentships are adjusted accordingly.

If students have other financial support which still allows them to fulfil their CEED obligations to you, they remain eligible for the CEED Studentship. Establishing their liability for tax, and the implications for any Austudy allowance, is the students' responsibility.



14. Arrangements for Site Work

- All CEED projects include a period when the Students work on their projects at the CEED Client's premises
- Extended periods on site (paid or unpaid) can also be negotiated.

Site work period

As part of the CEED project, your organisation arranges for the students to work on their project at your site for a predetermined period of time, depending upon the study level of the student. Students should negotiate dates with you for your mutual convenience. Please inform students of the times when you or other important personnel may be away.

Extended site period

If students wish to work on site for longer than the set period, they need to negotiate this separately with you. You are under no obligation to allow a longer period, nor to offer paid employment or additional remuneration for any extra period, but may do so if you wish. Any such arrangement is between you and the students, but please make sure there is a written record of the dates for any additional paid employment as there are insurance ramifications (see section: "Insurance and Safety on site").

Other site experience

Assessment of students' performance on CEED projects will be based on the assumption that they use the site work period effectively. Students should therefore spend the majority of their time on site working on their projects and matters directly relevant to the projects. They should *not* be asked to undertake any regular vacation training program (with the exception of safety induction programs). If clarification is needed on this, please contact the CEED Office.

Sometimes you may wish to offer an opportunity for students to gain additional experience which is useful even though it is of little relevance to the project. If so, students should be asked to discuss the matter with their Supervisor before accepting. Provided such opportunities do not interrupt project work for more than a total of 15% of the site work period, students are usually welcome to take the opportunity since broadening experience is a major aim of the CEED program.

Other site work arrangements

If students are unable to work the full amount of time during a particular period, they will need to negotiate alternative arrangements with you and their Supervisor so they can accumulate an equivalent period.

We suggest that students inform your Human Resources department of their CEED arrangements even though they are *not* "vacation students", and whether or not they are employed for an extra site period. Your assistance in this would be appreciated.



15. Insurance and Safety

- **Responsibility for safety and insurance needs to be understood because students are not employees of UWA or the CEED Client.**
- **UWA has some insurance in place, but all parties should know the situation.**

Safety is a vital concern, and all parties have a duty to ensure projects are conducted safely. Students generally have little experience of industrial safety and insurance, so they will need additional oversight.

Insurance

Insurance details are given in the Project Agreement mentioned in the section entitled "Agreements" so please check that document for definitive information. In brief (and subject to the appropriate clauses in the agreement), the university provides professional indemnity for CEED students while working on their projects, including periods when visiting and carrying out project work on site (excluding any periods in your employment), and some personal accident insurance (further information is available at: www.safety.uwa.edu.au/insurance). Students are encouraged to consider obtaining their own personal accident and public liability insurance.

Extended periods on site

If students arrange with you for an extended period of work on site with payment, *they effectively become employees of your organisation for the extra period* and workers' compensation insurance requirements apply for that period.

Should you elect to employ the student for an extra period on site, please ensure the dates are clearly stated in writing so that liability for insurance is always clear.

Safety on site

If your organisation requires the students to attend a work safety or other training program, please make arrangements directly with the students. Please impress upon your students that industrial sites often contain unforeseen dangers and encourage them to ask someone on site if in any doubt.



16. Agreements

- **The Standard CEED Project Agreement covers all basic aspects of CEED projects.**
- **Confidentiality requirements may be included.**
- **Intellectual property ownership must be agreed within 30 days of starting.**
- **Any IP concerns should be referred to the CEED Office as soon as they arise.**

Contractual documentation for CEED projects has been minimised, but still forms an important part of developing a sound working relationship between CEED Clients and the university. Contractual issues are handled by the CEED Office, not the Supervisor.

Agreement document

Unless your organisation has a special agreement in place, the "CEED Project Agreement" available at the CEED web site www.ceed.uwa.edu.au covers the commitments by the university and CEED Client with respect to the project, including arrangements for handling ownership of intellectual property.

Some important areas covered by the Agreement are outlined below for your convenience. In the event of any discrepancy between the Agreement and this manual, the Agreement takes precedence.

Agreement with Students

CEED students sign a formal application for, and acceptance of, their project. They also sign a "Student Undertaking" which formalises their relationship with the CEED Project Agreement.

Status of students: When students accept their CEED projects, they are acting as private individuals to perform a particular bit of work. *They are not employed by the university, nor by your organisation*, although we both commit time, effort and other resources to the project and the students' development.

If you require an additional agreement with your CEED students because of restrictions on site, it is generally made directly with the students. If confidentiality is the concern, you may find the standard CEED arrangements outlined in the next section will suffice. Please check the wording in the formal document.

Intellectual property

Experience has shown that Intellectual Property (IP) does not usually become a major issue with CEED projects, but can be a matter of concern with some CEED Clients. CEED projects can potentially develop material or knowledge of significant commercial value. Ownership of any resulting intellectual property could therefore be of considerable interest. We have found that projects are most productive when all



personnel are confident that they will benefit if their contributions is of major commercial value. The Standard CEED Project Agreement describes arrangements and the options available. The following may be helpful.

Few CEED projects result in an outcome of major commercial value in their own right, so the default option with the Standard CEED Project Agreement has intellectual property shared equally between the university and CEED Client. The University acts on behalf of the Students who are treated as if they were UWA staff, giving them benefits if UWA receives benefits.

With the alternative option, CEED Clients elect at the start of the project (i.e. within 30 days of the appointment of the first student) to pay a fixed fee surcharge to obtain full ownership of IP produced during the project. Ownership of "Background IP" is unaffected by the surcharge. If you require special arrangements to be negotiated, please inform the CEED Office.

Publications

Should any publications result from a CEED project, they are treated as joint publications by the various contributing individuals unless agreed otherwise.

Confidentiality

If CEED projects deal with commercially sensitive information, extra arrangements may need to be made. Student theses are normally "published" soon after project completion, which could have commercial implications. Publication of theses can be delayed if necessary for up to two years, but various other approaches can be used to cater for commercially sensitive material. Please discuss any concerns with the CEED Office.

If your organisation requires university personnel involved in the project (eg. Academic Supervisors or thesis markers) to sign individually an agreement on confidentiality, please either handle this directly with Supervisors, or contact the CEED Office.

