

## **ADVANCED CONCRETE TECHNOLOGY COURSE**

### **EXAMINATION 2 – PROJECT WORK (Web-based course)**

#### **Introduction**

These notes explain the role of the project in the ACT Diploma Examinations and offer suggestions on how the project should be approached. They also outline the role of the Project Supervisor.

#### **The project**

This forms half of your examination for the Diploma in Advanced Concrete Technology; the other half being the two written papers taken at the end of the course.

It can take the form of some original experimental work, a dissertation on work by others or a state-of-the-art report on a particular subject.

#### **Standard of work**

Those with ACT Diplomas will not only have a breadth of knowledge across the subject but can be expected to undertake and advise on a wide variety of work relating to concrete. These sectors may require research, be it only of a minor nature, to make judgements, reason, analyse data, draw conclusions and present reports. This is the basis for the inclusion of a project in this examination.

Naturally, each candidate will be more experienced in some aspects than in others but he should be able to show that he sees his project against a wider background of practical day-to-day technical or commercial situations and be able to discuss its relevance to these situations. He should also demonstrate an awareness of how wider issues can influence both a problem and its solution.

It will be necessary to show evidence of thought wider than the candidate's specialist knowledge. For example, a cement chemist choosing to do a project on an aspect of the composition of a particular cement must show that he is conversant with the practical problems on which his subject has a bearing rather than confining himself to developing a new method of adjusting the chemical composition of that cement. In a project assessing the efficiency of internal vibrators, coverage of the problems associated with compaction would be expected.

A standard test applied to a range of products to ascertain the 'best buy' would be unlikely to fulfil the requirements.

#### **Choice of subject**

Choose a topic that is suitable to you (probably one in which you have an interest). Have clear project objectives. Make sure that you are fully equipped to do the work. Generally the outcome of the project will be useful to the employer as well as the candidate.

## **Type of project**

As stated above, the project is normally one of three types:

Original experimental work, either laboratory or field, including a critical review of the data collected.

A practical survey, such as a survey of aggregate sources to assess their suitability for a large contract, or a survey of the condition of highway bridges after different periods in service. A critical review will be part of this project.

A state-of-the-art report; for example, the current use of admixtures in concrete in Saudi Arabia.

Most projects start off with a review of literature.

After discussion with the Course Organiser, a 300-word proposal is to be submitted.

On acceptance of the proposal the Course Organiser selects a Supervisor and arranges an initial meeting with the candidate.

## **Project Supervisor**

The Supervisor is there to assist, guide and advise throughout the project. Regular contact must be maintained and this is the responsibility of the candidate, although this will be monitored throughout by the Course Organiser and the ICT.

Should the candidate reach an impasse, the supervisor may elect to give more direct assistance to enable the project to be completed but this will be recorded in his report to the examiner, which goes with the completed project report.

A copy of the report form is attached.

The candidate should acknowledge in his report any suggestions or assistance from others.

## **Report length**

The project is judged on its contribution to technical knowledge not by its volume. Between 3500 and 5000 words should be the aim of the main text (max 6000 words); appendices and references can be added to this. The candidate may suggest further work for another if his work indicates this.

## **Report assessment**

The project examiner will assess the report for:

<u>Initial approach:</u>	selection of subject, determination of objective(s) and work programme
<u>Investigation:</u>	relevance to aim, breadth, thoroughness and detail.

<u>Analysis:</u>	understanding revealed by discussion of results and/or conclusions.
<u>Reporting:</u>	clarity, logical presentation and completeness.
<u>General:</u>	amount of work completed and personal factors affecting the candidate's work.

A candidate must obtain a pass mark for his project work as well as a pass mark for the written papers in order to obtain a Diploma in Advanced Concrete Technology.

### **Timetable**

At the start of the course you will be expected to have decided on your project and have communicated a written summary of your intentions to the Course Organiser.

Your project can start once the topic has been approved and a Supervisor has been appointed. This will be done by the Course Organiser but please feel free to make suggestions. The Supervisor will need to have a good knowledge of your topic and should be a member of the Institute of Concrete Technology (ICT) or an academic.

You may well need some of the knowledge gained on the course for your project but you should start work as soon as possible.

There must be regular contact with your Supervisor and this will be recorded and reported to the Course Organiser and the ICT.

Do not underestimate the amount of time it takes to write your report, collate all the information, submit it to your supervisor for his approval and ultimately send completed copies to ICT.

Two copies of the report must reach the ICT within three weeks of the second written examination.

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ADVANCED CONCRETE TECHNOLOGY COURSE  
Examination 2 – Project

**SUPERVISOR'S ASSESSMENT**

Please return this form, duly completed, at the same time as the Project Report is submitted, to  
ICT, 4 Meadows Business Park, Station Approach, Blackwater, Camberley, GU17 9AB, UK

**Candidate:** ..... **Supervisor:** .....

Please tick the appropriate boxes

Unsatisfactory			Satisfactory			Very good		
1	2	3	4	5	6	7	8	9

**Initial approach** (selection of subject, determination of objectives and work programme)

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**Investigation** (relevance to aim, thoroughness and detail, breadth)

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**Analysis** ( Understanding revealed by discussion of results and/or conclusion)

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**Reporting** (clarity, logical presentation and completeness)

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**Amount of work completed**

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**Remarks** (to include difficult circumstances, amount of assistance provided, language difficulties, etc.)

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**Signed** ..... **Date** .....