



# Approving Silver CREST

## A Approval Process

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*The approval process is:*

All project proposals submitted by the students are assessed by a CREST approver. Those that will obviously *meet*, or definitely *do not meet* the requirements of CREST will be sent back to the students with the appropriate response accompanied by relevant comments.

Any remaining projects that the general CREST approver is unable to approve will be sorted into topic areas and sent to an appropriate specialist for further consideration. The specialist will then assess the project based on the same approval criteria; they will allocate an approval category and add pertinent comments to both encourage the student and to provide guidance.

## B Approval Categories

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### a. Approved

These projects are deemed to have met the standard required. The approver provides useful comments and encouragement.

### b. Provisionally Approved

This category is for projects that the CREST approver has some reservations about—for instance perhaps the intent of the project is not clear. The approver will explain their reservations and provide guidance to the student for improving the project. (Projects sent on to a specialist for consideration may fall into this category.) The student must have addressed all concerns by the time of their first assessment, and the approver then ensures the project meets the CREST criteria.

### c. Not Approved: Please Resubmit

This category is for proposals with topics that have potential but the proposal itself is not suitable for a Silver CREST award. The student is therefore required to alter the focus of the project or add extra information to the proposal (eg consideration of ethics or a safety issue, which must also be brought to the attention of the supervising teacher). The approver will provide a clear explanation and guidance to develop the proposal into a sound CREST project. Again, projects sent on to a specialist for consideration may fall into this category.

### d. Not Approved

Most of the projects in this category will be sent back to the students at the first stage of approval; however a specialist approver may also need to use this rating. A student given this response will have the reasons fully explained to them, and will be required to choose another topic. The approver may assist by suggesting similar topics that would be more suitable for a CREST award.

## C Suitable Silver CREST Projects

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Projects can cover a wide range of subjects but the approver's job is to ensure that the project will be capable of meeting CREST criteria, as well as be safe for the student to conduct. They will also try to ensure that the student will have a rewarding experience in carrying out their project as the aim is to foster an interest in science and technology.

### i Is it a CREST project?

Approvers will check that the project has the potential to meet the CREST criteria. Does it have potential for creativity? Will there be a practical component? Is there a problem to solve or a product to design? Will the student be able to use and control factors to modify and improve the results?

### ii Is it safe?

Students must keep in mind the safety of themselves and others at all times. Proper supervision is required for some projects and the approver must ensure this will be provided by the school or the consultant.

### iii Is it ethical?

Projects must comply with accepted ethical standards relating to human or animal subjects: approvers must judge whether ethical approval will be required and if so, students must then verify that it has been received. Schools or regions have different ways of handling ethics approvals and guidance is provided in the Teachers' Guide as well as on the website.

### iv Is it feasible?

The approver will gauge time factors, skills and resources to ensure the student is attempting a project that is likely to reach successful completion. A Silver project is normally spread over three school terms and an average student will work on it for about an hour a week. (There are always exceptions of course.) Skills required must be appropriate to the Silver CREST award level (which includes consultant help) and resources are determined by what students can *reasonably* gain access to.

### v Is it challenging?

CREST is designed to challenge and extend students' interest and ability in the fields of science and technology—thus an approver will do their best to ensure a student is undertaking a project that is sufficiently challenging for them.

## D The Project Approval Form

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The students are required to complete a Project Approval form which includes a series of questions about the project. This then functions as a guide for developing the project:

### Project details:

#### ▪ Aim

The project will need to address a real need or opportunity that will be met through carrying out experimentation/design/technological practice;

#### ▪ Activities

Outlining these helps to indicate feasibility; provides a check that CREST criteria will be met; and indicates whether ethics approval will be required;

- **Consultant**

Their name and occupation need to be provided by the student so that the approver can ensure the student has a good match with their needs.

## Questions

### 1 Source of idea

The source is of interest as well as helping to determine ease of access to information;

### 2 Background on the topic

If the student has a strong background on the subject the approver needs to ensure they will be appropriately extended by their project;

### 3 Known test or design

The student needs to have completed a feasibility study on the topic to identify what is common practice in the area. For experimental projects, adapting the standard test can be a source of creativity so approvers need to know the techniques the student plans to use;

### 4 New ideas—a student's own design?

Approvers need to be alerted to a student's creative input into their project as creativity is one of the criteria for CREST;

### 5 Equipment needed

Knowing what is needed helps to ascertain project feasibility. (If the student identifies equipment they need, it is assumed that they have access to it unless stated otherwise)

### 6 Factors or variables affecting outcome

This section is to determine whether the student has a grasp of the important factors required to get a meaningful outcome, and can therefore signal an area that needs to be strengthened. The approver's suggestions may highlight other important areas that need to be taken into account to produce the most successful results;

### 7 Safety measures

This provides the approver with an opportunity to check safety concerns and ask the student to resubmit if they haven't been properly considered;

### 8 Ethics approval

The approver will determine whether this is needed/check it has been granted (see 3iii)

### 9 Real life problem

This answer can indicate whether or not it is – experience shows that failure to see the project in a real life context can lead to failure to complete a CREST project;

### 10 Benefit from the consultant

The consultant needs to be useful to the student, so that they keep in contact and develop a good relationship. While a project would not be declined due to lack of a consultant an approver might be able to suggest a better source of support if required;

### 11 School programme

It is useful to know what subject the student is completing the project for in order to make useful suggestions if necessary to better meet subject requirements.

## E CREST Criteria

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The CREST criteria are:

- |              |                |                            |                  |
|--------------|----------------|----------------------------|------------------|
| • creativity | • perseverance | • application of knowledge | • communication. |
|--------------|----------------|----------------------------|------------------|

There are two stages to the assessment process for Silver CREST awards after approval:

- 1 **Progress assessment:** the student meets with their assessor when their planning is complete, and on completion of the 'Progress Check' on page 12 of the Silver booklet
- 2 **Final assessment:** the student meets with their assessor on completion of their project. They themselves check that they have met all the assessment criteria on page 14 of the Silver booklet first.
  - ⊗ Project approval ensures that a project has the potential to meet CREST criteria.
  - ⊗ The final assessment ensures that it has.

### a. Progress Assessment (p 12)

This checks four basic areas:

- i Has the student found a project of real interest to them?
  - shown commitment
  - completed preliminary activities
  - got a good consultant
  - set a reasonable aim?
- ii Has the student completed some form of planning?
  - defined key objectives
  - decided on a timeline
  - referenced material and people
  - identified important factors?
- iii Is the project realistic in terms of:
  - material required
  - equipment and facilities
  - support
  - time
  - money?
- iv Is the student recording progress?
  - keeping a log
  - collecting the right material for reporting?

### b. Final Assessment (p 14)

This assessment is usually carried out through discussion with the student after their CREST folio (usually in report format) has been examined. The assessor checks that they have met all requirements for completing a CREST project. In particular the focus is on creative problem-solving as well as learning techniques to improve project work.

- i **Creativity—**
  - provided alternative approaches and solutions?
  - modified and improved?
  - shown creative thinking?
  - used own ideas to solve problems?
- ii **Problem-solving techniques—**
  - arrived at a meaningful outcome?
- iii **Communication—**
  - done independent work?
  - used good techniques?
  - completed a log?
  - used known knowledge?
  - shown ability to discuss with a consultant?
  - developed a CREST folio?