iDA
SINGAPORE

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FACT SHEET
CS Reloaded Programme

The Computer Science (CS) Reloaded Programme provides pre-tertiary students the opportunity to deepen their infocomm skills by supporting course fees for computer science courses anchored in computational thinking. The CS Reloaded Programme is an initiative under Strategy 1 of the Infocomm Manpower Development Roadmap v2.0 ("MDEV 2.0") to "Develop a World-Class Infocomm Education". The CS Reloaded Programme aims to:

- Develop and deliver enrichment courses that inculcates computational thinking in students by deepening students' infocomm skills and developing the understanding of computing concepts and applications; and
- To develop globally competitive infocomm professionals.

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Highlights of key achievements

- 802 students trained under the CS Reloaded Programme since its launch in April 2011.
- 4000 students to benefit from the programme over four years (2011 – 2014).

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Programme Description
The CS Reloaded Programme is targeted at pre-tertiary students (i.e. primary school, secondary school and junior college students). It is open to Singapore citizens and Permanent Residents only.

Through the CS Reloaded programme, students will have the opportunity to take up computer science courses, such as Games Programming, Python Programming and Cloud Computing, to expose themselves to different computing concepts and their application.

IDA will work with industry partners to develop and deliver relevant CS Reloaded courses that are able to inculcate computational thinking. In addition, IDA can bring interested schools and course providers together to customise CS Reloaded endorsed courses to meet the requirements and specifications of each school. Schools will then apply for endorsement for their students to take up relevant courses under the CS Reloaded Programme.

Programme Support

IDA will co-fund 50% of the total course fees, capped at $250 per student. Course fees will be reimbursed only after the completion of the course. Students are eligible to take up more than one course by the same course provider with the condition that the course is not the same as that which was previously taken.

Eligibility Criteria

The criteria* for the course endorsement are as follows:

- The course has to incorporate <u>at least one</u> of the following specific computational thinking techniques:
    - **Problem Decomposition:** Ability to break down a task to minute details.
    - **Pattern Recognition:** Ability to notice similarities or common differences that will help to make predictions or lead to shortcuts.
    - **Pattern Generalisation to define abstractions or models:** Ability to filter out information that is not necessary to solve a certain type of problem and generalize the information that is necessary.
    - **Algorithm Design:** Ability to develop a step-by-step strategy for solving a problem.
    - **Data Analysis and Visualisation:** Process of studying and summarizing data with the intent to extract useful information, develop conclusions and study of visual representation of data.

- The course should have a <u>minimum duration of 8 hours</u>, which can be spread over a few days.
- Participants must meet the <u>minimum 80% attendance</u> of the course.

    *Important Notes
    a. Minimum number of students per class is subjected to the course provider and school's arrangement.
    b. Timing and date of the course to be decided by the course provider and the school.
    c. Course providers and the schools will work together to customize the course to meet the requirements and specifications of the school.

FOR MORE INFORMATION

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