

Leaving Certificate Computer Science

Frequently Asked Questions (FAQ)

1. When will the new subject Computer Science be available in schools?

Leaving Certificate Computer Science (LCCS) will be available on a phased basis starting with a group of 40 schools in September 2018 (Phase 1) and available to all schools from September 2020 onwards (national roll-out).

From the beginning of the 2020/21 academic year, the new subject will be made available to all interested schools should they wish to offer it as an option for their Leaving Certificate programme for incoming fifth year students.

As part of this provision, a programme of continuing professional development (CPD) will be made available to teachers timetabled to teach LCCS from September 2020. This programme will commence during the 2019/20 academic year. Expressions of interest for schools to participate will be sought early in the 2019/20 academic year.

Only students from Phase 1 schools will sit Leaving Certificate examinations in 2020 and 2021.

2. When will students sit the first examination in Computer Science?

Students in Phase 1 schools will sit the first examination in Computer Science in June 2020. Additionally, only students from Phase 1 schools will sit the examination in June 2021.

3. How were schools selected for Phase 1?

Phase 1 of the implementation process involves a small cohort of schools who have the capacity to introduce Computer Science as a Leaving Certificate subject.

Schools were required to complete an application form and selected on the basis of the following criteria:

- Support from the Board of Management and senior leadership within the school, in consultation with the school community, for offering the subject;
- A willingness to offer Computer Science as a Leaving Certificate subject on the timetable from September 2018;
- The school was able to identify a teacher (or teachers) with relevant experience and/or qualifications who are willing to teach Computer Science and participate in professional development within school time;
- Consideration of a requirement for teachers to participate in some professional development in their own time;
- Identification of a viable number of students interested in studying Computer Science as a Leaving Certificate subject.

4. What resources will be required schools to be able to provide the subject?

Schools will require computers/laptops with physical keyboard for implementation of the Leaving Certificate Computer Science specification. Recommended minimum requirements for computers/laptops with for implementation of the Leaving Certificate Computer Science specification are as follows:

Technical Item	Recommended Requirements	Minimum
Processor	1 GHz processing speed or better	
Memory (RAM)	1 GB or better	
Screen Size	20" for desktops. 15" for laptops.	
Graphics Card	512 MB VRAM or better	
Hard Drive Disk (HDD)	128 GB or higher	
Operating System (OS)	A fully supported OS	

All computers/laptops will need access to the 100mbps broadband. A cloud storage system for student work may obviate the need for a specification on Hard Drive requirements. Most hard drives will exceed 128GB.

The course will require student access to computers with full access to standard web browsers. The physical space in which the classes work will need to accommodate students, computers and group work.

Strand 3 of the Computer Science specification is composed of four Applied Learning Tasks (ALT). Students and teachers will require access to a sufficient number of microprocessor units to complete the learning outcomes of Applied Learning Task 4 – Embedded Systems. The minimum technical specifications and features of a microprocessing unit that would be needed to meet the learning outcomes (LOs) within the Computer Science specification, and in particular the LOs of ALT4 (LO 3.11 – 3.14) are outlined below.

Minimum Specifications for Microprocessing Units required for completion by students of Leaving Certificate Physical Education assessment components.

Technical Item	Recommendation	Additional Information
RAM /Flash memory	Enough memory to achieve the necessary LOs.	This is the program space for programming the unit.
Clock Speed	>= 4MHz	
System Voltage	3 – 5 V	Modern logic levels are 3.3V
USB/micro USB	At least 1 form of native USB port is desirable	Some form of device – device communication is desirable
Digital and Analog IOs	Programmable access to at least 4 digital and analog IO pins.	Breakout boards (also known as Edge connectors) can enhance the number of IO pins.
Onboard sensors	Desirable but not essential.	Modern sensors can be purchased as required. Sensor interface can be achieved using some form of breakout or breadboard.

IDE/Programming Environment	Python / Javascript facility would be desirable	Other text-based or block-based languages may be necessary to learn.
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5. How many hours contact time will be required to teach the subject?

Computer Science is designed for 180 hours of class contact time.

6. What qualifications/experience do I need to have to be able to teach the subject?

Typically, teachers will have:

- Expressed a genuine interest in teaching Computer Science, having familiarised themselves with the specification;
- A willingness to undertake CPD to prepare for the introduction of the subject in their school and to develop/refresh skills such as computational thinking or research methodologies. Some CPD is likely to take place outside school time;
- Studied computer science, computing, computer or electronics engineering, information technology, software development (or related areas) as part of their primary degree or post-graduate studies;
- Relevant experience in related areas such as a short course in coding, a TY programming module, participation in recognised coding clubs and competitions e.g. coderdojo, coding Olympiad etc., engaged in professional learning related to computing technology and/or have carried out research in a relevant area.

7. How will the subject be assessed?

There are two assessment components at Higher and Ordinary level. An end-of-course examination (70%) and coursework (30%).

8. Will this new subject attract CAO points?

Yes, the CAO points allocation for Computer Science will be the same as for all Leaving Certificate subjects and will follow the Leaving Certificate 8-point grading scale.

9. When will the specification be available?

The final specification was approved by the Minister in December 2017 and is available on the NCCA website on www.ncca.ie.

10. What peer to peer supports are available for teachers?

A wide range of Teacher Professional Networks (TPNs) are funded by the Department of Education and Skills via Blackrock Education Centre. The Computer Education Society of Ireland (CESI) provides supports for teachers of Leaving Certificate Computer Science under the TPN scheme.

A full list of Teacher Professional Networks is available at <http://www.tpnetworks.ie/>.