## An Roinn Oideachais agus Scileanna Department of Education and Skills



To: Boards of Management, Principal Teachers and Teaching Staff of Post-Primary Schools, Special Schools and Chief Executives of Education and Training Boards (ETBs)

Curriculum-related developments at Senior Cycle with particular reference to school years 2019/20 and 2020/21, including the discontinuance of Leaving Certificate Agricultural Economics

#### 1. Introduction

The purpose of this circular is to inform second level schools of curriculum-related developments at senior cycle, with particular reference to the school years 2019/20 and 2020/21, including the discontinuance of Leaving Certificate Agricultural Economics.

### 2. Revised Specifications

Revised specifications have been prepared in the Leaving Certificate subjects listed below. These specifications will replace existing specifications, with implementation commencing from September 2019 or September 2020.

Implementation of the revised specifications will be supported by a programme of Continuing Professional Development (CPD) provided by the Professional Development Service for Teachers (PDST).

Revised Leaving Certificate Subject Specifications	Introduced to 5th year students	First Leaving Certificate examination
Agricultural Science	September 2019	June 2021
Economics	September 2019	June 2021
Art	September 2020	June 2022

### 3. New Specifications

New specifications have been prepared in Computer Science and Physical Education (PE) which can be offered by schools as additional optional Leaving Certificate subjects for examination. A small number of schools, 40 for Computer Science and 64 for PE, are participating in a first phase rollout of these subjects for students commencing fifth year in 2018/19 and 2019/20, with students in those schools completing the Leaving Certificate examinations in 2020 and 2021. From the start of the 2020/21 school year, these subjects will be available to all schools that wish to offer them. A further communication will be issued to all second-level schools early in the 2019/2020 school year in relation to the national rollout of these subjects.

Implementation of these new subjects is also supported by CPD programmes provided by PDST.

New specifications	National Rollout - Introduced to 5th year students	First Leaving Certificate examination
Computer Science	September 2020	2022
Leaving Certificate Physical Education	September 2020	2022

Schools wishing to introduce these new specifications from September 2020 should ensure they have in place the appropriately qualified teaching personnel, digital devices and infrastructure required for their implementation. Schools can, in this regard, deploy some of the ICT Infrastructure grants paid under the Digital Strategy for Schools towards this purpose. No additional funding will be made available. Details of the recommended specifications of the digital devices required are provided at Appendix 1.

#### 4. Senior Cycle Physical Education Framework

The Senior Cycle Physical Education Framework (the Framework) is designed to support teachers in planning quality learning in Physical Education for all students in senior cycle and will not be assessed as part of the Leaving Certificate examination. The Framework will assist schools to design a physical education programme for Senior Cycle students, including students who do and do not elect to take Physical Education as a subject for their Leaving Certificate examination. The Framework is structured around six curriculum models and is designed to be taught over two or three years of senior cycle. It is recommended that a double period or its equivalent per week is made available as a minimum requirement for teaching Senior Cycle Physical Education.

Currently 40 schools are participating in a first phase rollout of the Framework during 2018/19 and 2019/20. The Framework is available now to all schools for their consideration in planning Senior Cycle Physical Education. It will replace the guidelines set out in the *Rules and Programmes for Secondary Schools* which currently forms the basis for physical education at Senior Cycle. A further communication will be issued in this regard early in the 2019/20 school year.

The Framework is available at: <a href="https://www.curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Physical-Education-Framework">https://www.curriculumonline.ie/Senior-cycle/Senior-Cycle-Subjects/Physical-Education-Framework</a>.

#### 5. Discontinuance of Leaving Certificate Agricultural Economics

The Department wishes to confirm, in light of the introduction of revised specifications in Leaving Certificate Agricultural Science and Leaving Certificate Economics, that the subject Agricultural Economics will be examined for the last time during the Leaving Certificate examination in June 2020 for fifth year students who commenced the subject in September 2018. Therefore, this subject will not be available for examination, and resultant certification, to fifth year students who are commencing a Leaving Certificate programme in September 2019.

#### 6. Future developments

Languages Connect, Ireland's Strategy for Foreign Languages in Education 2017-2026, contains a commitment to commence development of Leaving Certificate specifications in Mandarin Chinese Polish, Lithuanian and Portuguese, with a view to implementation from September 2020 and first examination in June 2022.

Revised specifications in Leaving Certificate Applied Mathematics and Leaving Certificate Classical Studies as well as Leaving Certificate Applied Module Descriptors in English and Communications, ICT (Introductory Module and Specialism), and Mathematical Applications are being finalised.

A further communication regarding the implementation of these new and revised specifications and module descriptors will be issued in due course.

#### 7. Review of Senior Cycle

The NCCA have commenced a review of senior cycle programmes and vocational pathways, to include Transition Year, Leaving Certificate Applied, Leaving Certificate Vocational Programme and the Leaving Certificate Established. A representative sample of 41 schools is directly involved in the initial consultation cycles of the review, which features two cycles of thematic discussions about senior cycle education with the collaborating schools. Each cycle concludes with a national seminar involving representatives from the collaborating schools and the education partners. The first of two consultation cycles focused on the purpose of senior cycle and futures thinking, with the second consultation cycle focusing on pathways and flexibility. A summary report of the main findings of each cycle will be produced and published after each national seminar. Public consultation will take place in the period March to May 2019 with the final advisory report due in June 2019.

The review will offer those working in education and the general public an opportunity to contribute to building a shared vision for senior cycle, one from which the NCCA can shape a curriculum that meets the needs of all learners for years to come.

Further information is available at: <a href="https://www.ncca.ie/en/senior-cycle/senior-cycle-review">https://www.ncca.ie/en/senior-cycle/senior-cycle-review</a>.

#### 8. Related documents

Specifications for each of the subjects to be taught at Senior Cycle are developed by the NCCA and approved by the Minister. All specifications are currently available on

<u>http://www.curriculumonline.ie</u> which will be updated as new and revised specifications become available.

Please bring this circular to the attention of the board of management, principal and teaching staff of your school. Please also provide a copy of this circular to the appropriate parents' representatives.

Eamonn Moran
Curriculum and Assessment Policy Unit
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#### **APPENDIX 1**

# 1. Leaving Certificate Physical Education (LCPE) - digital devices to support implementation of the specification

The specification for LCPE will provide learners with an opportunity to study physical education for the Leaving Certificate examination, providing an additional optional Leaving Certificate subject.

Digital technology is central to teaching, learning and assessment in LCPE. As students learn in LCPE, they will use a variety of software tools to capture, analyse and plan to improve performance in physical activity.

The specification is presented in two strands with three assessment components: physical activity project (20%), performance assessment (30%) and the written examination (50%).

Efficient completion of the physical activity project and performance assessment will require effective use of technology. Schools will be required to have ICT resources available to facilitate completion of the various course assessment components in LCPE and will be required to ensure that these resources:

- meet minimum required specifications;
- are compatible with existing storage/hosting facilities in the school;
- will facilitate the transfer of data to the State Examinations Commission at the required time.

The recommended specifications for digital devices are set out below. Under procurement regulations, the Department cannot specify examples of compatible hardware.

# Recommended specifications for devices required for completion by students of LCPE assessment components

#### A. Digital Devices

- 9-10 inch screen
- 16 GB internal storage
  - The device may have a slot to increase memory
- 1080P HD camera
- Screen resolution of 1920 x 1200

Devices must be able to run the following operating systems:

- Android version 6.0 (Marshmallow) or newer
- iOS 8.1 or newer
- Windows 8.1 or newer

This minimum specification is based on the capacity to run entry level media creation/editing software and basic word processing, presentation and spreadsheet processing software.

### **B.** Additional ICT Equipment

The hardware required by each school to support uploading material from the digital devices is as follows:

- 2x 4TB External Drives
- USB Hub/Multiport
- Laptop with a minimum of 11 inch screen and 32 GB internal storage

# 2. Leaving Certificate Computer Science (LCCS) - equipment to support implementation of the specification

The LCCS specification comprises three strands. Strand 3 is composed of Four Applied Learning Tasks (ALT).

Schools will need to have a sufficient number of microprocessor units to facilitate teachers and students in carrying out ALT4. The minimum technical specifications and features of a microprocessing unit that would be needed to meet the learning outcomes (LOs) within the LCCS specification, and in particular the LOs of ALT4 are outlined below.

#### Recommended Specifications for Microprocessing Units required for completion by students of LCCS

Technical Item	Recommendation	Additional Information
RAM/Flash memory	Enough memory to achieve the necessary LOs.	This is the program space for programming the unit. (Typically of the order of 10 or more kilobytes will suffice).
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.

The majority of recently released versions of microprocessors or microcomputers will surpass the above recommendations in almost all areas. Schools should ensure that they have sufficient

equipment that will enable the LOs of ALT4 (LO 3.11 - 3.14) to be adequately achieved. It is essential that school authorities consult the LCCS teacher(s) to appraise the most efficient way to deploy the grant in support of the implementation of the subject.

Additionally, schools will need to provide appropriate computers for students to use as part of LCCS. All computers will need access to the 100Mbit/s broadband. A cloud storage system for student work may obviate the need for a specification on Hard Drive requirements.

Technical Item	Recommended Minimum Requirements
Processor	1 GHz processing speed or better
Memory (RAM)	1 GB
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