GETTING STARTED

Whether you already teach our existing GCE Technology and Design: Systems and Control specification, teach a similar specification with another awarding body, or are considering offering this for the first time, getting started with our revised specification really couldn't be easier:

Visit www.ccea.org.uk/specifications to view the full revised specification for your subject.

Attend the next available support event. Go online for our up-to-date events schedule.

Go to **www.ccea.org.uk/specifications** to download the full **GCE Technology and Design: Systems and Control AS & A2 Specification**

CONTACT US NOW

Subject Officer
Ed Paynter
Tel: (028) 9026 1200 ext 2133
Email: epaynter@ccea.org.uk

For queries in relation to:
Specification content
Subject-specific issues
Interpretation of exemplar papers & other materials

Specification Support Officer
Catriona Skelton
Tel: (028) 9026 1200 ext 2292
Email: cskelton@ccea.org.uk

For queries in relation to:
Requesting a meeting
Requesting further support
General subject-specific queries

Entries, Results and Certification Team
Nicola Laight
Tel: (028) 9026 1262 or ext 2392
Email: nlaight@ccea.org.uk

For queries in relation to:
Entries
Results

Distribution Team
Bernard Trainor
Tel: (028) 9026 1200 ext 2168
Email: btrainor@ccea.org.uk

For queries in relation to:
Requesting materials

WHATEVER YOUR QUERY, WE GUARANTEE YOU A PROMPT, FRIENDLY AND EFFICIENT SERVICE WHEN YOU CONTACT US

Check out our online leaflet *Customer Charter – Putting You First* at www.ccea.org.uk to view our service targets and our commitment to you.

"I'm really pleased to introduce this revised specification. We have designed it to meet the needs of learners in Northern Ireland whilst also providing a qualification that has international currency. We're proud to be your local awarding body. It is my priority to ensure that our dedicated subject team listens, responds and provides you with a first-class service."

Anne Marie Duffy – Examinations Manager, CCEA

"I'm delighted to provide robust operational systems that support all aspects of examination administration. Whether you are making entries, have a query about examinations or require assistance in relation to results, I can assure you that our specialised systems and customer-focused teams will provide you with the top-class level of service you expect."

Martin Quinn – Business Manager, Examination and Assessment Administration, CCEA

WHAT TEACHERS SAY ABOUT OUR EXAMINATIONS SERVICE....

98.9% of teachers are satisfied with the support and helpfulness of our staff.

95.5% of teachers are satisfied with the reliability and appropriateness of the materials we dispatch.

98.9% of teachers are satisfied with our administration of examinations.

* Source: CCEA's 2006 Post-Primary Customer Satisfaction Research

COUNCIL FOR THE **CURRICULUM EXAMINATIONS** AND **ASSESSMENT** 29 Clarendon Road, Clarendon Dock, Belfast BT1 3BG
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Rewarding Learning

REVISED GCE AS & A2

SPECIFICATION SNAPSHOT FOR TECHNOLOGY AND DESIGN: SYSTEMS AND CONTROL

For first teaching from September 2008

For first award of AS Level in Summer 2009
For first award of A Level in Summer 2010

Specification Snapshot for Revised **GCE Technology and Design: Systems and Control AS & A2**

Rewarding Learning

SUMMARY

- AS 1: **Product Design and Systems and Control**
  External exam, 2 hrs, 50% of AS, 25% of A Level, available January and Summer
- AS 2: **Coursework: Product Development**
  45 hrs of coursework, externally moderated, 50% of AS, 25% of A Level, available Summer
- A2 1: **Systems and Control**
  External exam, 2 hrs, 25% of A Level, available January and Summer
- A2 2: **Coursework: Product-System, System and Manufacture**
  60 hrs of coursework, externally moderated, 25% of A Level, available Summer

KEY FEATURES

- Builds on the experience gained through CCEA GCSE Technology and Design
- Leads to an endorsement in Systems and Control both at AS and A Level
- Promotes a broad experience for AS and a more focused one for advance GCE
- Reduces the assessment burden with its 4 unit structure
- Provides a solid foundation for study at a higher level in areas relating to engineering and design

BENEFITS TO LEARNERS

We have designed this specification to help learners develop:

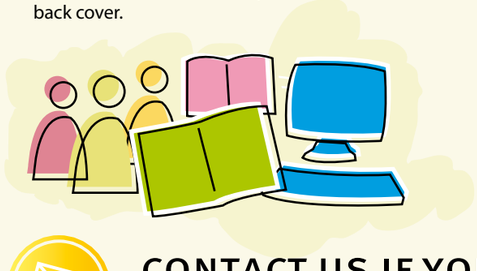
- Their tacit knowledge and reflective practices to work with tasks that are challenging and require definition;
- Creative and innovative practices;
- The ability to recognise and overcome challenges and constraints when working towards the production of high quality products;
- A critical understanding of the influences on design and technology from a contemporary and historical perspective;
- The ability to draw on a range of skills and knowledge from other subject areas;
- The ability to apply knowledge, understanding and skills on production processes to design and technological activities; and
- Their skills in using digital technologies and handling information.

CURRENT		NEW		WHAT HAS CHANGED AND WHY?	
MODULE	**TITLE**	**UNIT**	**TITLE**	**WHAT HAS CHANGED?**	**WHY HAS IT CHANGED?**
AS 1	Product Design and Practice: Materials, Components and their Uses	**AS 1**	Product Design and Systems and Control	Students study a compulsory Section A on Product Design and Practice. They can also study one of two specialist areas of Systems and Control: • Section B on Electronic and Microelectronic Control Systems; or • Section C on Mechanical and Pneumatic Control Systems.	To provide students with a familiar assessment of Product Design while also giving them the opportunity to study in more detail a specialist area of Systems and Control
AS 2	Coursework: Product Development	**AS 2**	Coursework: Product Development	The emphasis of this unit is on the analysis and development of an existing product, with a view to *re-designing* either the product or an aspect of it. The coursework now represents 45 hours of work instead of 30 hours and is worth 50% of the AS award and 25% of the GCE award.	To allow students to provide a more in-depth re-design of an existing product that will draw on their knowledge and understanding of AS 1 To fulfil subject criteria requiring that three AS units be reduced to two
AS 3	Systems Control: Industrial and Commercial Practices			We have deleted this unit. It is now contained in AS 1 as part of the optional sections.	To fulfil subject criteria requiring that three AS units be reduced to two
A2 1	Coursework: In-depth Study: Designing	**A2 1**	Systems and Control	This unit is an in-depth study of Systems and Control and is externally assessed. The unit provides students with the option to study either: • Section A on Electronic and Microelectronic Control Systems; or • Section B on Mechanical and Pneumatic Control Systems.	So students can further the knowledge and understanding they have gained from the optional sections in AS 1 and be assessed solely in that area of study
A2 2	Coursework: Making	**A2 2**	Coursework: Product-System, Design and Manufacture	This unit combines the current A2 1 and A2 2 units. Students are now required to *design* and *manufacture* a technological product or system. The coursework represents 60 hours and is worth 25% of the GCE award.	To fulfil subject criteria requiring that three A2 units be reduced to two
A2 3	Systems and Control in Product Design			We have deleted this unit. It is now assessed in A2 1.	To fulfil subject criteria requiring that three A2 units be reduced to two and to provide a more symmetric and balanced assessment as found at AS level

COUNT ON US FOR SUPPORT...

LOCAL SUPPORT › IN PERSON

- We are your **local awarding body**, so we can provide personalised support and visits to you and your centre upon request. Contact the Specification Support Officer named on the back cover if you would like to arrange for us to visit you, your department or your students.
- If you have a query or require advice/guidance, please contact the relevant person listed on the back cover.



LOCAL SUPPORT › AT TEACHER-FOCUSED EVENTS

We provide a comprehensive programme of events to support this specification which includes:

- **FREE launch events** to introduce you to the revised specification; and
- **FREE seminars** to support its teaching and assessment and to assist you with subject-specific issues.

We will mail invitations to Heads of Department at least three weeks in advance of each event. Alternatively, check out our full list of support events online at www.ccea.org.uk/spec-changes

SUPPORT › ONLINE

Most of the support we provide will be available on your subject microsite. The site will contain:

- The latest version of the GCE Technology and Design: Systems and Control specification;
- Schemes of Work;
- Chief Examiner's Reports with top tips for improving examination performance;
- Exemplar Papers and Mark Schemes; and
- Exemplification of Standards (available after the first examination series).

Visit your subject microsite by logging on to www.ccea.org.uk and selecting it from the dropdown menu.

SUPPORT › IN PRINT

Some of the materials listed above are also available in print. To find out which materials and publications are currently available for your subject:

- Contact Bernard Trainor in our Distribution Team on (028) 9026 1200 ext 2168; or
- Go to www.ccea.org.uk to view our *Examination and Assessment Sales Catalogue*.

CONTACT US IF YOU DON'T FIND WHAT YOU ARE LOOKING FOR

BACKGROUND TO THE REVISION PROCESS

During the Revision of Specifications process, we consulted our stakeholders through:

- Questionnaires
- Focus Group meetings
- Subject Advisory Team meetings.

We have drawn up this revised specification with the help of:

- Teachers and Heads of Departments in post-primary schools;
- Lecturers in Institutes of Further and Higher Education;
- Representatives from Employer Committees;
- Subject experts from Education and Library Boards; and
- Specialists from our Curriculum Development Teams.