



## National 5 Graphic Communication

<b>Course code:</b>	C835 75
<b>Course assessment code:</b>	X835 75
<b>SCQF:</b>	level 5 (24 SCQF credit points)
<b>Valid from:</b>	session 2017–18

The course specification provides detailed information about the course and course assessment to ensure consistent and transparent assessment year on year. It describes the structure of the course and the course assessment in terms of the skills, knowledge and understanding that are assessed.

This document is for teachers and lecturers and contains all the mandatory information you need to deliver the course.

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# Course overview

The course consists of 24 SCQF credit points which includes time for preparation for course assessment. The notional length of time for a candidate to complete the course is 160 hours.

The course assessment has two components.

Component	Marks	Duration
Component 1: question paper	80	2 hours
Component 2: assignment	40	See course assessment section

Recommended entry	Progression
<p>Entry to this course is at the discretion of the centre.</p> <p>Candidates should have achieved the fourth curriculum level or the National 4 Graphic Communication course or equivalent qualifications and/or experience prior to starting this course.</p>	<ul style="list-style-type: none"><li>◆ other qualifications in graphic communication or related areas</li><li>◆ further study, employment and/or training</li></ul>

## Conditions of award

The grade awarded is based on the total marks achieved across all course assessment components.

## Course rationale

National Courses reflect Curriculum for Excellence values, purposes and principles. They offer flexibility, provide more time for learning, more focus on skills and applying learning, and scope for personalisation and choice.

Every course provides opportunities for candidates to develop breadth, challenge and application. The focus and balance of assessment is tailored to each subject area.

The National 5 Graphic Communication course provides progression mainly from the craft, design, engineering and graphics experiences and outcomes. Candidates broaden their skills in a creative environment and are encouraged to exercise imagination, creativity and logical thinking.

The course allows candidates to develop an awareness of graphic communication as an international language and an understanding of how graphic communication technologies impact on society and the environment.

Candidates initiate, develop and communicate ideas graphically, and develop spatial awareness and visual literacy through graphic experiences. They interpret graphic communications initiated by others, and use graphic communication equipment, software and materials effectively.

The course also provides opportunities to build self-confidence and enhance skills in numeracy, ICT, planning and organising work tasks, and in working independently and in collaboration with others. Candidates develop skills in critical thinking, decision-making and communication.

## Purpose and aims

The course provides opportunities for candidates to gain skills in reading, interpreting and creating graphic communications. They also learn to apply knowledge and understanding of graphic communication standards, protocols and conventions.

The course is practical, exploratory and experiential in nature and combines elements of recognised professional standards for graphic communication, partnered with graphic design creativity and visual impact.

Candidates develop:

- ◆ skills in graphic communication techniques, including the use of equipment, graphics materials and software
- ◆ the ability to extend and apply knowledge and understanding of graphic communication standards, protocols and conventions
- ◆ an understanding of the impact of graphic communication technologies on our environment and society

## **Who is this course for?**

This course is a broad-based qualification, suitable for learners with an interest in both digital and paper-based graphic communication. It is largely learner-centred, includes practical and experiential learning opportunities and is suitable for those wanting to progress onto higher levels of study or a related career.

# Course content

The course develops skills in two main areas. Candidates are able to apply these skills to produce graphics that provide relevant visual impact and graphics that transmit information.

## 2D graphic communication

Candidates develop creativity and skills within a 2D graphic communication context. They initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts, as well as in some less familiar or new contexts. Candidates also develop 2D graphic spatial awareness.

## 3D and pictorial graphic communication

Candidates develop creativity and skills within a 3D and pictorial graphic communication context. They initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts, as well as in some less familiar or new contexts. Candidates also develop 3D graphic spatial awareness.

# Skills, knowledge and understanding

## Skills, knowledge and understanding for the course

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- ◆ replicating basic, familiar and some new graphic forms in 2D, 3D and pictorials
- ◆ initiating and producing simple preliminary, production and promotional graphics in straightforward, familiar and some new contexts
- ◆ initiating and producing simple informational graphics in straightforward, familiar and some new contexts
- ◆ visual literacy by interpreting simple but unfamiliar graphic communications
- ◆ spatial awareness in straightforward but unfamiliar 2D, 3D and pictorial graphic situations
- ◆ using standard graphic communication equipment, software and materials effectively for simple tasks with some complex features
- ◆ knowledge of graphic communication standards, protocols and conventions in straightforward but unfamiliar contexts
- ◆ applying design skills, including creativity, when developing solutions to simple graphics tasks with some complex features
- ◆ the ability to take initiative in evaluating work in progress and completed graphics and applying suggestions for improvement in presentation
- ◆ knowledge of a range of computer-aided graphics techniques and practices
- ◆ knowledge of colour, illustration and presentation techniques in straightforward, familiar and some unfamiliar contexts
- ◆ knowledge and understanding of the impact of graphic communication technologies on our environment and society

## Skills, knowledge and understanding for the course assessment

The following provides details of skills, knowledge and understanding sampled in the course assessment:

Question paper		Assignment	
Graphic types	Knowledge and understanding of the role of preliminary, production and promotional graphics in graphic communication activities.	Graphic types	Skills in producing effective preliminary, production and promotional graphic communications.
Manual techniques	Knowledge and understanding of the role of manual and computer-aided techniques and processes and their comparative merits when producing effective and informative graphic communications and solutions.	Manual and/or computer-aided techniques	Skills in selecting and applying manual and/or computer-aided graphic techniques and processes, using graphic communication applications and a range of common graphic media, equipment and/or devices, to produce effective and informative graphic communications.

Question paper		Assignment
Computer-aided techniques	<p>Knowledge and understanding of the role of computer-aided techniques:</p> <ul style="list-style-type: none"> <li>◆ describing processes, stages and generic commands applied (or to be applied) in producing graphic solutions</li> <li>◆ ranges, features and uses of graphic hardware and software and computer systems file management</li> <li>◆ digital input and output devices and the advantages and limitations of computer-aided design (CAD)</li> <li>◆ application of light source, surface texture and materials in both 2D CAD and 3D CAD illustrations</li> </ul>	



Question paper		Assignment	
Drawing standards, protocols and conventions	<p>Knowledge, understanding and identification of recognised drawing standards, protocols and conventions commonly used in engineering and construction:</p> <ul style="list-style-type: none"> <li>◆ line types: outline, projection, dimension, centre, hidden detail, cutting plane and fold</li> <li>◆ dimensioning: linear, chain, parallel, radial, diameter, angular, square, across flats and across corners</li> <li>◆ symbols and conventions</li> <li>◆ conventions for sectioning and hatching</li> <li>◆ symbols for building construction</li> <li>◆ third-angle projection system and symbols</li> <li>◆ building construction drawing: location plans, site plans, floor plans, sectional views, elevations and scales</li> </ul>	Applying drawing standards, protocols and conventions	<p>Skills in applying recognised drawing standards, protocols and conventions, while producing responses and/or solutions to a graphic communication problem or situation:</p> <ul style="list-style-type: none"> <li>◆ line types: outline, projection, dimension, centre, hidden detail, cutting plane and fold</li> <li>◆ dimensioning: linear, chain, parallel, radial, diameter, angular, square, across flats and across corners</li> <li>◆ symbols and conventions</li> <li>◆ conventions for sectioning and hatching</li> <li>◆ symbols for building construction</li> <li>◆ third-angle projection system and symbols</li> <li>◆ building construction drawing: location plans, site plans, floor plans, sectional views, elevations and scales</li> </ul>

Question paper		Assignment	
Geometric shapes and forms and everyday objects	<p>Knowledge, understanding and skills in spatial awareness when interpreting geometric shapes and forms and/or those used in the communication of everyday objects:</p> <ul style="list-style-type: none"> <li>◆ common geometric forms and everyday objects consisting of squares, rectangles, circles, hexagons, octagons, right prisms, pyramids, cones and cylinders</li> <li>◆ partial or single cuts to these forms</li> <li>◆ components based on geometric forms</li> <li>◆ combinations of two components</li> </ul>	Geometric shapes and forms and everyday objects	<p>Skills in producing graphics representing everyday objects, based upon geometric shapes and forms in supporting the production of graphic communications:</p> <ul style="list-style-type: none"> <li>◆ common geometric forms and everyday objects consisting of squares, rectangles, circles, hexagons, octagons, right prisms, pyramids, cones and cylinders</li> <li>◆ partial or single cuts to these forms</li> <li>◆ components based on geometric forms</li> <li>◆ combinations of two components</li> </ul>

Question paper		Assignment	
Views and techniques	<p>Knowledge and understanding of the role, benefits and use of a variety of views and techniques in 2D, 3D and pictorial formats, in communicating geometric shapes and forms and everyday objects:</p> <ul style="list-style-type: none"> <li>◆ orthographic projection of geometric forms and everyday objects in third-angle projection</li> <li>◆ true lengths and true shapes</li> <li>◆ surface developments, sectional views, assembly drawings and exploded isometric views</li> <li>◆ pictorial views: one- and two-point perspective, isometric, oblique and planometric</li> </ul>	Views and techniques	<p>Skills in the appropriate selection and use of 2D, 3D and pictorial views and techniques, to produce graphic communications:</p> <ul style="list-style-type: none"> <li>◆ orthographic projection of geometric forms and everyday objects in third-angle projection</li> <li>◆ true lengths and true shapes</li> <li>◆ surface developments, sectional views, assembly drawings and exploded isometric views (minimum of three parts)</li> <li>◆ pictorial views: one- and two-point perspective, isometric (including curves), oblique (including curves) and planometric</li> </ul>

Question paper		Assignment	
Layout elements and principles, colour theory and informational graphics	<p>Knowledge and understanding of the types of promotional graphics, informational graphics (including graphs and charts) and their associated roles.</p> <p>Interpretation and identification of creative techniques used for effective promotional graphics:</p> <ul style="list-style-type: none"> <li>◆ alignment, dominance, unity, depth, contrast, line, the use of colour (warm, cool, contrast, harmony, advancing, receding, mood, tints, shades, primary, secondary and tertiary), reflection and shade</li> <li>◆ using a range of manual and electronic techniques in promotional graphics</li> </ul>	Creativity in producing effective promotional documents	<p>Skills in applying creative and effective techniques to generate ideas and to produce effective promotional graphic responses to a graphic communication problem or situation:</p> <ul style="list-style-type: none"> <li>◆ using design elements and principles: alignment, dominance, unity, depth, contrast, line, the use of colour (warm, cool, contrast, harmony, advancing, receding, mood, tints, shades, primary, secondary and tertiary), reflection and shade</li> <li>◆ using a range of manual and electronic techniques in promotional documents</li> </ul>

Question paper	Assignment	
	Techniques in sketching	<p>Skills in applying electronic and/or manual sketching techniques:</p> <ul style="list-style-type: none"> <li>◆ proportion, line quality, vanishing points, line sketching using related orthographic views and single- and two-point perspective</li> <li>◆ representations of geometric forms and everyday objects in supporting the production of graphic communications</li> </ul>
	Illustration techniques using manual and/or computer-aided formats	<p>Skills in using illustration techniques to create effective and informative graphic communications:</p> <ul style="list-style-type: none"> <li>◆ representations of light, shade, shadow, reflection, tone, gradient, material, texture and layout</li> <li>◆ visual enhancement techniques in supporting the production of graphic communications</li> </ul>

Question paper		Assignment
Computer-aided design	<p>Knowledge, understanding and interpretation of techniques and generic drawing and editing commands and terms:</p> <ul style="list-style-type: none"> <li>◆ 2D drawing tools: line, circle, ellipse, arc, rectangle, copy, zoom, mirror, trim, rotate, chamfer, fillet, pattern fill and scale</li> <li>◆ import and export</li> <li>◆ 3D modelling features: extrusion and revolve/revolved solids</li> <li>◆ 3D modelling edits: shell, subtraction, fillet and chamfer</li> <li>◆ assemblies (mate, align and centre axis)</li> <li>◆ techniques in producing orthographic and pictorial views using CAD</li> <li>◆ the use and function of CAD libraries</li> </ul>	

Question paper		Assignment	
Desktop publishing	<p>Knowledge, understanding and interpretation in explaining and justifying using desktop publishing (DTP) techniques and generic terms:</p> <ul style="list-style-type: none"> <li>◆ copy/cut/paste, text box, handles, colour fill, margin, single-page format, title, extended text, cropping, text wrap, flow text along a path, serif and sans serif font styles, bleed, transparency, drop shadow, rotate, justification, paper sizing, reverse, column, gutter, caption, header and footer, line, grid, snap to grid, guidelines and snap to guidelines</li> <li>◆ the use and role of thumbnails and annotation</li> </ul>	Desktop publishing	<p>Skills in applying desktop publishing (DTP) techniques when planning and producing graphic layouts:</p> <ul style="list-style-type: none"> <li>◆ copy/cut/paste, text box, handles, colour fill, margin, single-page format, title, extended text, cropping, text wrap, flow text along a path, serif and sans serif font styles, bleed, transparency, drop shadow, rotate, justification, paper sizing, reverse, column, gutter, caption, header and footer, line, grid, snap to grid, guidelines and snap to guidelines</li> <li>◆ thumbnails and annotation</li> </ul>

Question paper		Assignment	
Graphic communication technology: impact on society and the environment	<p>Knowledge and understanding of the impact and influence of graphic communication technologies on society and the environment:</p> <ul style="list-style-type: none"> <li>◆ soy ink and wax ink</li> <li>◆ 3D printing</li> <li>◆ touchscreen devices</li> <li>◆ the paperless office</li> <li>◆ use of recycled materials</li> <li>◆ CAD as it supports manufacturing and other industries</li> <li>◆ DTP in marketing and promotional activities</li> <li>◆ remote working</li> <li>◆ communication crossing international boundaries</li> </ul>		
		Safe working	Using safe working practices and systems which support graphic communication activities in studios and other such working environments.

Skills, knowledge and understanding included in the course are appropriate to the SCQF level of the course. The SCQF level descriptors give further information on characteristics and expected performance at each SCQF level ([www.scqf.org.uk](http://www.scqf.org.uk)).



# Skills for learning, skills for life and skills for work

This course helps candidates to develop broad, generic skills. These skills are based on [SQA's Skills Framework: Skills for Learning, Skills for Life and Skills for Work](#) and draw from the following main skills areas:

## **2 Numeracy**

2.2 Money, time and measurement

## **4 Employability, enterprise and citizenship**

4.2 Information and communication technology (ICT)

## **5 Thinking skills**

5.2 Understanding

5.3 Applying

5.4 Analysing and evaluating

These skills must be built into the course where there are appropriate opportunities and the level should be appropriate to the level of the course.

Further information on building in skills for learning, skills for life and skills for work is given in the course support notes.

# Course assessment

Course assessment is based on the information provided in this document.

The course assessment meets the key purposes and aims of the course by addressing:

- ◆ breadth — drawing on knowledge and skills from across the course
- ◆ challenge — requiring greater depth or extension of knowledge and/or skills
- ◆ application — requiring application of knowledge and/or skills in practical or theoretical contexts as appropriate

This enables candidates to apply:

- ◆ knowledge and understanding to describe and explain graphic communication techniques, methods and standards
- ◆ knowledge and understanding to interpret simple but unfamiliar graphic communications
- ◆ knowledge and understanding to provide and/or suggest solutions and/or recognised methodologies to limited and simple graphic problems or situations
- ◆ knowledge and skills to produce a solution to an appropriately challenging graphic communication problem

## Course assessment structure: question paper

### Question paper

**80 marks**

The question paper has one section and gives candidates the opportunity to demonstrate skills, knowledge and understanding relating to:

Area	Range of marks
Computer-aided design techniques	15–20
Graphic items in specific situations	8–10
Manual and electronic methods of graphic communication	6–14
Spatial awareness	12–17
Drawing standards, protocols and conventions	10–17
Use of colours, layout and presentation techniques	15–20

The question paper has 80 marks, which is 67% of the overall marks for the course assessment (120 marks).

A proportion of marks are available for more challenging questions, which generally require interpretation and/or integration of more complex graphic communications. This could be in the complexity of the expected response, the descriptions and/or justifications of more detailed and/or complex processes, or problem-solving.

Candidates may support their answers by sketching (if desired) to further illustrate and support their response, however, sketching is not a requirement. Candidates are not required to draw with instruments.

Questions allow for a variety of response types, including short/limited responses and extended responses.

### **Setting, conducting and marking the question paper**

The question paper is set and marked by SQA and conducted in centres under conditions specified for external examinations by SQA.

Candidates complete the paper in 2 hours.

Specimen question papers for National 5 courses are published on SQA's website. These illustrate the standard, structure and requirements of the question papers candidates sit. The specimen papers also include marking instructions.

## **Course assessment structure: assignment**

### **Assignment**

**40 marks**

The assignment assesses the ability to apply graphic communication skills and knowledge developed and acquired during the course in the context of defined tasks, which require candidates to respond to a problem or situation.

It has three areas covering preliminary, production and promotional graphics. These may, or may not, be thematically related and include various tasks that candidates complete.

Marks are awarded for:

<b>Area</b>	<b>Range of marks</b>
Preliminary graphics	10–20
Production graphics	10–20
Promotional graphics	10–20

The assignment provides an opportunity for candidates to:

- ◆ demonstrate graphic design skills and creativity
- ◆ use graphic communication technologies
- ◆ produce preliminary, production and promotional graphic items in response to a situation or problem
- ◆ use illustration techniques to create graphics with relevant visual impact
- ◆ produce 2D and 3D production drawings, applying appropriate standards, protocols and conventions (drawing includes manual or electronic production methodologies)
- ◆ review and evaluate their progress, giving justification for the choice of graphic items and the graphic communication techniques employed

The assignment has 40 marks, which is 33% of the overall marks for the course assessment (120 marks).

### **Setting, conducting and marking the assignment**

The assignment is:

- ◆ set by SQA, on an annual basis
- ◆ conducted under a high degree of supervision and control
- ◆ submitted to SQA for external marking

All marking is quality assured by SQA.

### **Assessment conditions**

#### **Time**

The assignment is carried out over 8 hours, starting at an appropriate point in the course, once all content has been delivered.

#### **Supervision, control and authentication**

The assignment must be carried out:

- ◆ without interruption by periods of learning and teaching
- ◆ in a classroom environment
- ◆ on an individual basis by the candidate (ie no group work is permitted)
- ◆ in a supervised environment, to ensure that work presented is the candidate's own

#### **Resources**

This is a closed book assessment. Candidates cannot have access to learning and teaching materials, the internet, notes, exemplar materials, resources on classroom walls or anything similar.

Each assessment task includes instructions and details of any equipment or materials required.

### **Reasonable assistance**

Candidates are required to progress through each stage of the assignment without any teacher intervention or guidance, having acquired the skills earlier in the course.

Once assignments are completed, they cannot be returned to candidates for further work.

### **Evidence to be gathered**

Full details of evidence requirements, are contained within each assessment task.

All candidate evidence (whether created manually or electronically) must be submitted to SQA in paper-based format.

### **Volume**

Candidates should present their work on a maximum of eight single-sided A3-sized pages.

The above is given to indicate the volume of evidence required. No penalty will be applied where candidates exceed this.

## **Grading**

A candidate's overall grade is determined by their performance across the course assessment. The course assessment is graded A–D on the basis of the total mark for all course assessment components.

### **Grade description for C**

For the award of grade C, candidates will typically have demonstrated successful performance in relation to the skills, knowledge and understanding for the course.

### **Grade description for A**

For the award of grade A, candidates will typically have demonstrated a consistently high level of performance in relation to the skills, knowledge and understanding for the course.

# Equality and inclusion

This course is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

For guidance on assessment arrangements for disabled candidates and/or those with additional support needs, please follow the link to the assessment arrangements web page: [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

# Further information

The following reference documents provide useful information and background.

- ◆ [National 5 Graphic Communication subject page](#)
- ◆ [Assessment arrangements web page](#)
- ◆ [Building the Curriculum 3–5](#)
- ◆ [Design Principles for National Courses](#)
- ◆ [Guide to Assessment](#)
- ◆ [SCQF Framework and SCQF level descriptors](#)
- ◆ [SCQF Handbook](#)
- ◆ [SQA Skills Framework: Skills for Learning, Skills for Life and Skills for Work](#)
- ◆ [Coursework Authenticity: A Guide for Teachers and Lecturers](#)
- ◆ [Educational Research Reports](#)
- ◆ [SQA Guidelines on e-assessment for Schools](#)
- ◆ [SQA e-assessment web page](#)

# Administrative information

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## History of changes to course specification

Version	Description of change	Authorised by	Date

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Note: You are advised to check SQA's website to ensure you are using the most up-to-date version of the course specification.

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