



Advanced Higher Graphic Communication

Draft National Course Assessment Specification



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Please refer to the note of changes at the end of this Course Assessment Specification for details of changes from previous version (where applicable).

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Course outline

Course title:	Advanced Higher Graphic Communication
SCQF level:	7 (32 SCQF credit points)
Course code:	to be advised
Course assessment code:	to be advised

The purpose of the Course Assessment Specification is to ensure consistent and transparent assessment year on year. It describes the structure of the Course assessment and the mandatory skills, knowledge and understanding that will be assessed.

Course assessment structure

Component 1 — project	120 marks
Component 2 — question paper	80 marks
Total marks	200 marks

This Course includes eight SCQF credit points for 40 additional programmed hours to allow preparation for Course assessment. The Course assessment covers the added value of the Course.

Equality and inclusion

This Course Assessment Specification has been designed to ensure that there are no unnecessary barriers to assessment. Assessments have been designed to promote equal opportunities while maintaining the integrity of the qualification.

For guidance on assessment arrangements for disabled learners and/or those with additional support needs, please follow the link to the Assessment Arrangements web page: www.sqa.org.uk/sqa/14977.html.

Guidance on inclusive approaches to delivery and assessment of this Course is provided in the *Course Support Notes*.

Assessment

To gain the award of the Course, the learner must pass all of the Units as well as the Course assessment. Course assessment will provide the basis for grading attainment in the Course award.

Course assessment

SQA will produce and give instructions for the production and conduct of Course assessments based on the information provided in this document.

Added value

The purpose of the Course assessment is to assess added value of the Course as well as confirming attainment in the Course and providing a grade. The added value for the Course will address the key purposes and aims of the Course, as defined in the Course Rationale. It will do this by addressing one or more of breadth, challenge, or application.

To achieve success in the Course, learners must show that they are able to apply these to respond effectively to situations within both practical and theoretical graphics contexts.

In this Course assessment, added value will focus on the following:

- ◆ 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

Through the Graphic Communication Units, the learner will develop a range of professional techniques and skills in the production of complex graphic communications partnered with a deep knowledge and understanding of the application of those skills and techniques in satisfying the needs of specific audiences.

The added value will be assessed through a learner-generated graphic communication project and a question paper.

The project will require the learner to produce a practical graphic solution to a realistic or actual technical or commercial and/or visual media situation. This will allow the learner to confirm their capabilities through challenge and application.

The question paper will require learners to demonstrate aspects of breadth and application in a graphic context, based on recognised graphic principles and those used in the graphic communication industries.

This will be achieved through:

- ◆ applying knowledge and understanding developed through the Units to describe and explain professional graphic communication techniques, methods and standards
- ◆ applying knowledge and understanding developed through the Units to interpret unfamiliar, potentially complex graphic communications and the needs of specific audiences

- ◆ applying skills and knowledge developed through the Units to produce graphic communication solutions in a response to potentially complex audience needs

Grading

Course assessment will provide the basis for grading attainment in the Course award.

The Course assessment is graded A–D. The grade is determined on the basis of the total mark for all Course assessments together.

A learner's overall grade will be determined by their performance across the Course assessment.

Grade description for C

For the award of Grade C, learners will have demonstrated successful performance in all of the Units of the Course. In the Course assessment, learners will typically have demonstrated successful performance in relation to the mandatory skills, knowledge and understanding for the Course.

Grade description for A

For the award of Grade A, learners will have demonstrated successful performance in all of the Units of the Course. In the Course assessment, learners will typically have demonstrated a consistently high level of performance in relation to the mandatory skills, knowledge and understanding for the Course.

Credit

To take account of the extended range of learning and teaching approaches, remediation, consolidation of learning and integration needed for preparation for external assessment, six SCQF credit points are available in Courses at National 5 and Higher, and eight SCQF credit points in Courses at Advanced Higher. These points will be awarded when a Grade D or better is achieved.

Structure and coverage of the Course assessment

The Course assessment will consist of two Components: a project and a question paper.

Component 1 — project

The purpose of the project is to assess the practical application of knowledge and skills from across the Course to develop a solution to an appropriately challenging and complex graphic communication task requiring challenge and application. It will assess the learner's skills in identifying opportunities to present solutions to satisfy perceived graphic needs, research markets and audiences, produce effective graphic solutions, critically evaluate and report on the solution and the process.

The project will have 120 marks (60% of the total mark).

Time will be required for:

- ◆ preparation for the project, which could include establishing the brief and/or liaising with a partnered client
- ◆ creating a project plan and undertaking research activities and background reading
- ◆ creating a range of graphic ideas
- ◆ selecting and developing a final proposal or proposals
- ◆ evaluating the graphic solution and process
- ◆ presenting final design work appropriately

Evidence will be produced through the learner's response to a self-generated brief or through a partnership arrangement. The project may be based on a combination of the principles, practices and techniques from across the Course or more focused and specific as required by the brief.

Marks will be awarded for:

- ◆ determining the needs of the audience and creating a project brief and specification
- ◆ planning and producing the final graphic solution or solutions, using recognised techniques and practice
- ◆ presenting and evaluating the solution and process

Component 2 — question paper

The question paper will give learners an opportunity to demonstrate the following skills, knowledge and understanding:

- ◆ Demonstrate their understanding of the range of techniques and practices used in technical, commercial and visual media graphic communications.
- ◆ Demonstrate reasoning ability by interpreting the graphic communication needs of specific audiences.
- ◆ Justify presented graphics in terms of purpose and audience needs.
- ◆ Demonstrate an understanding of the use and impact of contemporary graphic communication technology in the creation of effective technical or commercial and visual media graphics.
- ◆ Comment knowledgeably on graphic communication as it impacts on our environment and society.

The question paper will have 80 marks (40% of the total mark).

The question paper will have two Sections.

Section 1 will have 40 marks. It will consist of limited response answer questions covering both Units.

Section 2 will have 40 marks. It will consist of two extended questions.

Question 1 will have 20 marks. It will focus on the impact of graphic communication on society and the environment.

Question 2 will have 20 marks and will allow candidates to answer in a technical graphics context or a commercial and visual media context.

The question paper will give learners the opportunity to demonstrate the application of knowledge and understanding to answer questions by drawing on and applying knowledge and understanding from the table provided in the 'Further mandatory information on Course coverage' section at the end of this Course Assessment Specification.

Setting, conducting and marking of assessment

Question paper

The question paper will be set and marked by SQA, and conducted in centres under conditions specified for external examinations by SQA. Learners will complete the question paper in 2 hours.

Controlled assessment — project

The project is:

- ◆ set by centres within SQA guidelines
- ◆ conducted under some supervision and control

Evidence will be internally marked by centre staff in line with SQA marking instructions.

All marking will be quality assured by SQA.

Setting the assessment

SQA will provide guidance on the generation of a graphic communication project brief. Learners will create, in negotiation with their teacher/lecturer, their own brief based on a realistic or actual graphic need. Learners may draw from either or both of the Units according to the requirements of the brief.

Conducting the assessment

The project will be carried out under open book conditions, but supervised to ensure that the work presented is the candidate's own work.

The teacher/lecturer may also give learners support and guidance to help them progress through each stage of the project.

The project is designed to discriminate between candidates, and therefore would be expected to provide a wide range of marks. Stronger candidates should be able to complete the project successfully with minimal support and guidance. Weaker candidates may not be able to complete all aspects of the project to a satisfactory standard.

Further mandatory information on Course coverage

The following gives details of mandatory skills, knowledge and understanding for the Advanced Higher Graphic Communication Course. Course assessment will involve sampling the skills, knowledge and understanding. This list of skills, knowledge and understanding also provides the basis for the assessment of the Units of the Course.

The Course assessment (project and question paper) will require learners to draw on and apply knowledge of any of the concepts listed below. This table should be read in conjunction with the descriptions of the project and the question paper.

The following gives details of the skills, knowledge and understanding.

Advanced Higher Graphic Communication	
Technical Graphics	
Common elements to technical graphics	
Creators and users Knowledge and understanding of the roles and needs of those who may encounter, use, draw, read or explain any form of technical, engineering or production drawing.	
Graphic types	Knowledge, understanding and skills in interpreting audience requirements and producing effective graphic responses for: <ul style="list-style-type: none"> ◆ preliminary, production and promotional graphics
Techniques	Skills, knowledge and application of: <ul style="list-style-type: none"> ◆ creative techniques when using graphic instruments or devices, and a range of graphics media
Drawing standards, protocols and conventions	Knowledge and skills in applying: <ul style="list-style-type: none"> ◆ recognised standards, protocols and conventions in engineering and construction drawings, including line types, symbols for sections, including stepped sections ◆ according to context, display variances in use of scale, detail, layout, measurement, layering functions, materials and symbols, tolerances
Computer-aided design and draughting	Knowledge and skills in applying: <ul style="list-style-type: none"> ◆ recognised techniques, customs and practices across 3D modelling and 2D draughting software, including drawing and editing commands and terms ◆ standard 2D draughting commands and including import and export ◆ standard 3D modelling techniques and including morphing, extrusion along a path (sweeps), regular and irregular fillets and chamfers, lofting, blending and surface modelling ◆ techniques in the production of orthographic and pictorial work using computer-aided design
Computer-aided illustration	Knowledge and skills in applying: <ul style="list-style-type: none"> ◆ professional use of rendering technology to create scenes or illustrations with visual impact; including

	<p>the use of texture mapping, bump-mapping, lighting, reflection, specular, ambience, depth-of-field, Image Based Lighting/High Dynamic Range Imagery (IBL/HDR) and volumetrics</p> <ul style="list-style-type: none"> ◆ the use of polygons in the production of 3D graphics, including Boolean functions of add, subtract and Intersect, slice
Built environment	
Creators and users Knowledge and understanding of the roles and needs of designers, architects, architectural technicians, landscape architects, construction trades, building surveyors, quantity surveyors, consultant engineers, town planners, conservation bodies, communities, model makers, interior designers, suppliers, production and planning, prospective purchasers and members of the general public.	
Planning drawing	<p>Knowledge of the use of:</p> <ul style="list-style-type: none"> ◆ electrical drawings, plumbing drawings, drainage surveys, underground surveys — storm water, foul water, services, gas, electric and telecommunications ◆ feature surveys; textile paving, seating, lighting ◆ topological surveys; standards, layout and use
Manufacturing and engineering	
Creators and users Knowledge and understanding of the roles and needs of designers, consultants and engineering trades (civil, structural, electrical, mechanical, structural, systems) manufacturers, fabricators, model makers, test labs, materials technologists, specification engineers, suppliers, production and planning.	
Simulation	<p>Knowledge and skills in the use of:</p> <ul style="list-style-type: none"> ◆ digital testing methods, eg Finite Element Analysis (FEA) or Computational Fluid Dynamics (CFD) to simulate how parts of a 3D model would perform if produced in reality, mechanical animation
CAD CAM systems	<p>Knowledge and skills in the use of:</p> <ul style="list-style-type: none"> ◆ 3D model manipulation to prepare for CAM production ◆ communicating surface finish and datums ◆ gathering model information on volume, centre of mass and mass of the model
Technical graphic file formats and their use	<p>Knowledge and skills in the use of:</p> <ul style="list-style-type: none"> ◆ Standard Tessellation Language/stereo lithography file format (STL), Direct Exchange Format (DXF), Drawing Format (DWG), Virtual Reality Modelling Language (VRML) and 3D Studio (3DS) files
Commercial and Visual Media Graphics	
Common elements to commercial and visual media graphics	
Creators and users Knowledge and understanding of the roles and needs of graphic designers, artists, sales and marketing, public, community, advertising,	

creative industries, retailers, cinematic, television, electronic and interactive media, animation, web designers.	
Desktop publishing	<p>Knowledge and skills in the application of:</p> <ul style="list-style-type: none"> ◆ techniques, customs and practices across a range of packages, generic terms and techniques in supporting context and audience requirements ◆ planning strategies
Desktop publishing file formats and their use	<p>Knowledge and understanding of:</p> <ul style="list-style-type: none"> ◆ JPG, PNG, BMP, PDF, AI, WMV, AVI, 3GP, QuickTime file formats
Commercial print media	
Print technologies	<p>Knowledge and understanding of:</p> <ul style="list-style-type: none"> ◆ various printing technologies, including laser, ink-jet, wide-format, screen printing, offset lithography and solid ink systems ◆ quality and standards in colour printing, including an understanding of RGB, CMYK, and Pantone ◆ edge-to-edge, bleed, gutter, registration marks, colour calibration, dots-per-inch (DPI) ◆ photo-reduction, duplexing, camera-ready copy, paper weight, paper opacity, use of calendaring for glossy print
Digital visual media	
Visual technologies	
Animation	<p>Knowledge, understanding of, and application as required of:</p> <ul style="list-style-type: none"> ◆ creation of animated graphics making use of motion-capture, stop-frame, or motion tweening ◆ post-editing of video files and use of video graphic technologies, including blend/fade, zoom, transition and overlays

Administrative information

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Superclass: to be advised

History of changes

Course details	Version	Description of change	Authorised by	Date

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Note: You are advised to check SQA's website (www.sqa.org.uk) to ensure you are using the most up-to-date version of the Course Specification.