

## Preparing students for tomorrow, bit by bit

The Computing department will help to create, share, and apply knowledge in all branches of Computer Science and ICT. We will educate students to be successful, ethical, and effective problem-solvers with a passion to innovate and create, rather than just passive consumers and users of technology. We will develop an understanding and appreciation of all aspects of digital products, from how they work to how they look. We will foster curiosity and encourage exploration to create students who can contribute positively to the well-being of our society and who are prepared to tackle the complex 21st Century challenges facing the world.

Summary focus areas:

- Innovate, create, develop
- Solving 21st Century problems
- Active developers not passive consumers

Autumn		Spring		Summer
Digital Graphics Coursework	Digital Graphics Coursework Exam Preparation	2D 3D Character Coursework	Digital Animation Coursework	Improvements/ Resits

Homework for iMedia is set weekly to support and extend the students' studies from their lessons. Work may be a mixture of practical, computer-based tasks and paper-based written work or design tasks. Activities set as homework may be:

- Preparatory work or research ahead of a new topic or concept being discussed in lessons.
- Extension work that allows the student to explore a topic in more depth or in other contexts.
- Application work that allows students to practise skills or demonstrate abilities.

Students are expected to spend around an hour on a homework activity each week and work is marked promptly to help students to identify and understand their weaknesses to make incremental improvements over the course of the year.

Unit	Duration (lessons)	Learning Objectives/Outcomes
Digital Graphics Coursework	20	<ul style="list-style-type: none"> <li>• Produces a summary of how and why digital graphics are used, demonstrating a thorough understanding of the purpose of digital graphics</li> <li>• Identifies a wide range of file types and formats, which are consistently appropriate to digital graphics</li> <li>• Demonstrates a thorough understanding of the connection between the properties of digital graphics and their suitability for use</li> <li>• Demonstrates a thorough understanding of how different purposes and audiences influence the design and layout of the digital graphics</li> <li>• Produces an interpretation from the client brief which fully meets the client requirements</li> <li>• Produces a clear and detailed identification of target audience requirements</li> <li>• Clearly draws upon relevant skills/knowledge/ understanding from other units in the specification</li> <li>• Produces a clear and detailed work plan for the creation of the digital graphic, which is fully capable of producing the intended final product</li> <li>• Produces a clear and detailed visualisation diagram for the intended final product</li> <li>• Identifies most assets needed to create a digital graphic, demonstrating a thorough understanding of their potential use</li> <li>• Identifies most of the resources needed to create a digital graphic, demonstrating a thorough understanding of their purpose</li> <li>• Demonstrates a thorough understanding of legislation in relation to the use of images in digital graphics</li> <li>• Sources and creates a wide range of assets for use in the digital graphic</li> <li>• Prepares the assets for use in the digital graphic, all of which are technically appropriate and compatible.</li> <li>• Use of a range of advanced tools and techniques to create the digital graphic is effective and therefore creates a complex digital graphic which is appropriate for the client brief</li> <li>• Consistently saves and exports the digital graphic in formats and properties, which are appropriate.</li> <li>• Consistently saves electronic files using file and folder names and structures which are consistent and appropriate</li> <li>• Produces a review of the finished graphic which demonstrates a thorough understanding of what worked and what did not, fully referencing back to the brief</li> <li>• Review identifies areas for improvement and further</li> </ul>

		development of the final digital graphic, which are wholly appropriate and justified
2D 3D Character creation Coursework	20	<ul style="list-style-type: none"> <li>• Demonstrates a thorough understanding of when and where 2D and 3D digital characters are used.</li> <li>• Describes a range of 2D and 3D digital characters and details a range of software, including some complex types, that can be used to create them</li> <li>• Demonstrates a thorough understanding of physical and facial characteristics of a wide range of 2D and 3D digital characters</li> <li>• Produces an interpretation from the client brief for a 2D or 3D digital character which fully meets the client requirements</li> <li>• Produces a clear and detailed identification of target audience requirements</li> <li>• Identifies many assets needed to create a 2D or 3D digital character, demonstrating a thorough understanding of their potential use</li> <li>• Identifies many of the resources needed to create a 2D or 3D digital character, demonstrating a thorough understanding of their purpose</li> <li>• Produces a clear and detailed work plan for the 2D or 3D digital character, which is fully capable of producing the intended final character</li> <li>• Clearly draws upon relevant skills/knowledge/ understanding from other units in the specification</li> <li>• Produces a clear and detailed visualisation diagram for the 2D or 3D digital character</li> <li>• Creates a clear and detailed test plan for the character which fully tests the functionality, listing tests, expected and actual outcomes and identifying re-tests</li> <li>• Demonstrates a thorough understanding of legislation in relation to the use of assets in 2D and 3D digital characters</li> <li>• Sources and stores a wide range of assets for use, consistently uses appropriate methods</li> <li>• Uses a wide range of software tools and techniques to create the visualised character</li> <li>• Adds and applies a wide range of effects to enhance the character</li> <li>• Consistently saves and exports the 2D or 3D digital character in appropriate formats</li> <li>• Consistently saves electronic files using file and folder names and structures which are consistent and appropriate</li> <li>• Produces a review of the finished character which demonstrates a thorough understanding of what worked and what did not, fully referencing back to the brief</li> <li>• Review identifies areas for improvement and further</li> </ul>

		development of the final character, which are wholly appropriate and justified
Digital Animation Coursework	20	<ul style="list-style-type: none"> <li>• Demonstrates a thorough understanding of the purposes and uses of animations</li> <li>• Describes a wide range of animation techniques and types, demonstrating a thorough understanding of the advantages and disadvantages of each</li> <li>• Produces an interpretation from the client brief for a digital animation which fully meets the client requirements</li> <li>• Produces a clear and detailed identification of target audience requirements</li> <li>• Clearly draws upon relevant skills/knowledge/ understanding from other units in the specification</li> <li>• Describes file formats and their properties with accuracy. Judgment of suitability for the digital animation is almost always accurate</li> <li>• Creates a detailed storyboard which identifies a wide range of resources and assets to be used</li> <li>• These choices will consistently be appropriate to the client requirements</li> <li>• Demonstrates a thorough understanding of legislation in relation to the use of assets, ideas and concepts in digital animations</li> <li>• Sources and stores a wide range of assets for use, consistently using methods which are appropriate</li> <li>• Creates a clear and detailed test plan for the animation which fully tests the functionality, listing tests, expected and actual outcomes and identifying re-tests</li> <li>• Uses tools and techniques within the animation software to fully address the client brief, to create the digital animation</li> <li>• Uses many functions within the animation software to enhance and animate movement</li> <li>• Carries out thorough testing of the digital animation at regular intervals during production</li> <li>• Consistently saves and exports the digital animation in an appropriate format</li> <li>• Consistently saves electronic files using file and folder names and structures which are consistent and appropriate</li> <li>• Produces a review of the digital animation which demonstrates a thorough understanding of what worked and what did not, fully referencing back to the brief</li> <li>• Review identifies areas for improvement and further development of the digital animation, which are wholly appropriate and justified</li> </ul>