Specialization Courses

(VGD)

Course Title: ICT-VG1 Information and Communication Technology

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the fundamental concepts of information and communication technology
- Identify and use various hardware and software tools for computer systems
- Understand the principles of computer networks and the internet
- Understand the basics of web design and development
- Develop skills in using various office productivity software such as word processing, spreadsheets, and presentation software
- Understand the principles of digital security and data protection

Introduction:

Welcome to ICT-VG1 Information and Communication Technology. In this course, we will explore the fundamental concepts of information and communication technology and provide you with the skills and knowledge necessary to navigate the digital world. We will cover topics such as computer systems, networks, the internet, web design and development, office productivity software, and digital security.

Discussion:

In this course, you will learn about the fundamental concepts of information and communication technology, including the basic components of a computer system, such as the CPU, RAM, and storage devices. You will also identify and use various hardware and software tools for computer systems, including operating systems, applications, and peripherals.

Furthermore, we will explore the principles of computer networks and the internet, including network topologies, protocols, and the basics of internet architecture. You will also learn the basics of web design and development, including HTML, CSS, and JavaScript, and develop skills in using various office productivity software such as word processing, spreadsheets, and presentation software.

Lastly, we will discuss the principles of digital security and data protection, including the importance of protecting personal information and data, preventing cyber attacks, and maintaining data confidentiality and integrity.

Conclusion:

By the end of this course, you will have gained a comprehensive understanding of the fundamental concepts of information and communication technology, identified and used various hardware and software tools for computer systems, and developed skills in using various office productivity software such as word processing, spreadsheets, and presentation software. You will also understand the principles of computer networks and the internet, web design and development, and digital security and data protection.

This course will equip you with the necessary skills and knowledge to navigate the digital world and use technology effectively and securely. We hope this course will enable you to make the most of the digital tools and resources available to you and prepare you for a successful career in the digital age.

Course Title: ICT-VG2 Drawing 1

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the fundamental concepts and techniques of drawing
- Develop skills in sketching, shading, and creating textures
- Understand the principles of perspective and proportion
- Explore the use of color in drawing
- Develop skills in using digital drawing tools and software

Introduction:

Welcome to ICT-VG2 Drawing 1. In this course, we will explore the fundamental concepts and techniques of drawing and provide you with the skills and knowledge necessary to create compelling and engaging drawings. We will cover topics such as sketching, shading, perspective, proportion, color, and the use of digital drawing tools and software.

Discussion:

In this course, you will learn about the fundamental concepts and techniques of drawing, including sketching, shading, and creating textures. We will explore the principles of perspective and proportion, including one-point, two-point, and three-point perspective, and develop skills in creating convincing spatial illusions in drawings.

Furthermore, we will discuss the use of color in drawing, including color theory, color harmony, and the use of color to create mood and emotion in drawings. We will also explore digital drawing tools and software, including graphics tablets, digital pens, and software such as Adobe Photoshop and Procreate.

Conclusion:

By the end of this course, you will have gained a comprehensive understanding of the fundamental concepts and techniques of drawing, developed skills in sketching, shading, and creating textures, and understood the principles of perspective and proportion. You will also have explored the use of color in drawing and developed skills in using digital drawing tools and software.

This course will equip you with the necessary skills and knowledge to create engaging and compelling drawings using traditional and digital techniques. We hope this course will enable you to explore your creativity and develop your artistic skills, whether for personal enjoyment or as a foundation for a career in the visual arts.

Course Title: ICT-VG4 Software Applications and Multimedia Arts

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the principles of multimedia arts
- Develop skills in creating multimedia content using software applications
- Understand the concepts and techniques of graphic design
- Develop skills in using graphic design software
- Understand the basics of audio and video production
- Develop skills in using audio and video editing software

Introduction:

Welcome to ICT-VG4 Software Applications and Multimedia Arts. In this course, we will explore the principles of multimedia arts and provide you with the skills and knowledge necessary to create multimedia content using software applications. We will cover topics such as graphic design, audio and video production, and the use of software applications to create multimedia content.

Discussion:

In this course, you will learn about the principles of multimedia arts, including the use of visual, audio, and interactive elements to create compelling and engaging multimedia content. We will also discuss the concepts and techniques of graphic design, including layout, color theory, and typography, and develop skills in using graphic design software such as Adobe Illustrator and Photoshop.

Furthermore, we will explore the basics of audio and video production, including recording, editing, and mixing audio and video content, and develop skills in using audio and video editing software such as Adobe Audition and Premiere Pro.

Throughout the course, we will use various software applications to create multimedia content, including interactive presentations, digital publications, and multimedia websites.

Conclusion:

By the end of this course, you will have gained a comprehensive understanding of the principles of multimedia arts, developed skills in creating multimedia content using software applications, understood the concepts and techniques of graphic design, and developed skills in using graphic design software. You will also have understood the basics of audio and video production and developed skills in using audio and video editing software.

This course will equip you with the necessary skills and knowledge to create engaging and compelling multimedia content using software applications. We hope this course will enable you to explore your creativity and develop your multimedia production skills, whether for personal enjoyment or as a foundation for a career in the multimedia arts industry.

Course Title: ICT-VG5 Principles of Graphic Design and Communication

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the principles of graphic design
- Develop skills in using graphic design software
- Understand the principles of effective communication
- Develop skills in creating visual content that communicates effectively

Introduction:

Welcome to ICT-VG5 Principles of Graphic Design and Communication. In this course, we will explore the principles of graphic design and provide you with the skills and knowledge necessary to create visual content that communicates effectively. We will cover topics such as layout, color theory, typography, and effective communication.

Discussion:

In this course, you will learn about the principles of graphic design, including layout, color theory, and typography, and develop skills in using graphic design software such as Adobe Illustrator and Photoshop. We will also discuss the principles of effective communication, including understanding your audience, crafting a message, and creating visual content that communicates effectively.

We will explore how to create visual content that communicates effectively, including using images, typography, and color to convey your message. We will also discuss the importance of visual hierarchy, contrast, and balance in creating effective visual content.

Throughout the course, we will use graphic design software to create various visual content, including logos, posters, and infographics.

Conclusion:

By the end of this course, you will have gained a comprehensive understanding of the principles of graphic design, developed skills in using graphic design software, understood the principles of effective communication, and developed skills in creating visual content that communicates effectively.

This course will equip you with the necessary skills and knowledge to create visually compelling and effective visual content that communicates your message effectively. We hope this course will enable you to explore your creativity and develop your graphic design and communication skills, whether

for personal enjoyment or as a foundation for a career in graphic design or visual communication.

Course Title: ICT-VG6 Storyboarding and Scriptwriting

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the principles of storytelling and scriptwriting
- Develop skills in creating storyboards and scripts for various mediums such as film, television, and animation
- Understand the importance of character development, pacing, and narrative structure
- Develop skills in visual storytelling and creating compelling visuals to support the story

Introduction:

Welcome to ICT-VG6 Storyboarding and Scriptwriting. In this course, we will explore the principles of storytelling and scriptwriting and provide you with the skills and knowledge necessary to create compelling storyboards and scripts for various mediums such as film, television, and animation.

Discussion:

In this course, you will learn about the principles of storytelling and scriptwriting, including character development, pacing, and narrative structure. We will also discuss how to create compelling visuals to support the story, including creating storyboards that effectively communicate the story to the audience.

We will explore the process of developing a story from concept to completion, including brainstorming, outlining, and refining the story. We will also discuss the importance of research and the development of characters that are compelling and relatable to the audience.

Throughout the course, we will use various mediums such as film, television, and animation to create storyboards and scripts. We will also explore different formats for scripts, including screenplays and teleplays, and the differences between them.

Conclusion:

By the end of this course, you will have gained a comprehensive understanding of the principles of storytelling and scriptwriting, developed skills in creating storyboards and scripts for various mediums such as film, television, and animation, and understood the importance of character development, pacing, and narrative structure. You will also have developed skills in visual storytelling and creating compelling visuals to support the story.

This course will equip you with the necessary skills and knowledge to create compelling and engaging stories, whether for personal enjoyment or as a foundation for a career in scriptwriting, filmmaking, or animation. We hope this course will enable you to explore your creativity and develop your storytelling and visual communication skills.

Course Title: ICT-VG7 Graphic Design 1

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the principles of graphic design, including color theory, typography, and composition
- Develop basic skills in using graphic design software such as Adobe Photoshop and Illustrator
- Apply design principles to create visually appealing and effective designs for print and digital media
- Understand design trends and how to create designs that communicate effectively to a specific audience

Introduction:

Welcome to ICT-VG7 Graphic Design 1. In this course, we will explore the principles of graphic design and provide you with the skills and knowledge necessary to create visually appealing and effective designs for both print and digital media.

Discussion:

In this course, you will learn about the principles of graphic design, including color theory, typography, and composition. We will explore the elements of design and how to use them to create visually appealing and effective designs.

You will develop basic skills in using graphic design software such as Adobe Photoshop and Illustrator, including how to create and manipulate graphics, work with layers, and apply special effects. We will also discuss best practices for working with images and text in your designs.

Throughout the course, we will apply design principles to create designs for both print and digital media, including flyers, posters, and social media graphics. We will also explore design trends and how to create designs that communicate effectively to a specific audience.

Conclusion:

By the end of this course, you will have gained a comprehensive understanding of the principles of graphic design and developed basic skills in using graphic design software such as Adobe Photoshop and Illustrator. You will be able to apply design principles to create visually appealing and effective designs for both print and digital media, and understand design trends and how to create designs that communicate effectively to a specific audience.

This course will equip you with the necessary skills and knowledge to create professional-looking designs for personal or professional projects. Whether you are pursuing a career in graphic design or simply interested in developing your design skills, we hope this course will enable you to explore your creativity and develop your design abilities.

Course Title: ICT-VG9 Introduction to Photography & Digital Imaging

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the basics of photography, including composition, lighting, and exposure

- Develop skills in using a digital camera and editing software

- Apply basic techniques in post-processing to enhance their images

- Understand the principles of color theory and its application in photography

- Create visually appealing and effective photographs for various purposes

Introduction:

Welcome to ICT-VG9 Introduction to Photography & Digital Imaging. In this course, we will explore the basics of photography and provide you with the skills and knowledge necessary to create visually appealing and effective photographs using digital cameras and editing software.

Discussion:

In this course, you will learn about the basics of photography, including composition, lighting, and exposure. We will explore the elements of design and how they apply to photography. You will develop skills in using a digital camera and editing software, including how to adjust brightness, contrast, saturation, and hue.

We will also discuss the principles of color theory and its application in photography, including how to use color to create mood and convey emotion in your images. Throughout the course, you will apply basic techniques in post-processing to enhance your images, such as cropping, resizing, and sharpening.

By the end of the course, you will have developed the skills to create visually appealing and effective photographs for various purposes, such as social media, personal or professional projects, and even for sale.

Conclusion:

In conclusion, this course has equipped you with the basic knowledge and skills necessary to create visually appealing and effective photographs using digital cameras and editing software. You have learned about composition, lighting, exposure, and color theory, and how to apply these principles to create photographs that are both aesthetically pleasing and meaningful.

We hope that this course has sparked your interest in photography and inspired you to continue learning and exploring your creativity. Whether you pursue photography as a hobby or a career, the skills you have learned in this course will be valuable and useful for years to come.

Course Title: ICT-VG10 Programming Languages

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the basic concepts of programming languages and computer programming
- Write programs using at least one programming language
- Design and implement basic algorithms
- Use conditional statements and loops to control program flow
- Understand and apply fundamental data structures and algorithms
- Debug programs to identify and fix errors

Introduction:

Welcome to ICT-VG10 Programming Languages. In this course, we will explore the basic concepts of programming languages and provide you with the skills and knowledge necessary to write programs using at least one programming language.

Discussion:

In this course, you will learn about the basic concepts of programming languages and computer programming. We will explore different types of programming languages, their features, and their applications. You will also learn how to write programs using at least one programming language, such as Python or Java.

We will cover fundamental programming concepts, including how to design and implement basic algorithms, use conditional statements and loops to control program flow, and understand and apply fundamental data structures and algorithms. You will also learn how to debug programs to identify and fix errors.

Throughout the course, you will work on several programming projects that will help you develop your programming skills and apply what you have learned.

Conclusion:

In conclusion, this course has equipped you with the basic knowledge and skills necessary to write programs using at least one programming language. You have learned about different types of programming languages, fundamental programming concepts, and how to design and implement basic algorithms.

We hope that this course has sparked your interest in programming and inspired you to continue learning and exploring your creativity. Whether you pursue programming as a hobby or a career, the skills you have learned in this course will be valuable and useful for years to come.

Course Title: ICT-VG11 Introduction to Programming

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the basic concepts of computer programming
- Write simple programs using a programming language
- Understand the importance of good programming practices
- Analyze simple problems and design algorithms to solve them
- Use basic programming constructs such as conditional statements, loops, and functions
- Debug simple programs to identify and fix errors

Introduction:

Welcome to ICT-VG11 Introduction to Programming. In this course, we will introduce you to the fundamental concepts of computer programming and provide you with the skills and knowledge necessary to write simple programs.

Discussion:

In this course, you will learn about the basic concepts of computer programming, including variables, data types, and control structures. You will also learn how to write simple programs using a programming language such as Python or Java.

We will cover the importance of good programming practices, such as code commenting and variable naming conventions. You will also learn how to analyze simple problems and design algorithms to solve them. We will cover basic programming constructs such as conditional statements, loops, and functions.

Throughout the course, you will work on several programming projects that will help you develop your programming skills and apply what you have learned.

Conclusion:

In conclusion, this course has introduced you to the fundamental concepts of computer programming and provided you with the skills and knowledge necessary to write simple programs. You have learned about variables, data types, control structures, and basic programming constructs such as conditional statements, loops, and functions.

We hope that this course has sparked your interest in programming and inspired you to continue learning and exploring your creativity. Whether you pursue

programming as a hobby or a career, the skills you have learned in this course will be valuable and useful for years to come.

Course Title: ICT-VG12 Web Design and Development

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the basic concepts of web design and development
- Create responsive and visually appealing websites using HTML, CSS, and JavaScript
- Use web development tools such as text editors, version control systems, and web browsers
- Understand the importance of user experience and accessibility in web design
- Deploy websites to a web server and manage web hosting services
- Use web analytics tools to monitor website traffic and user behavior

Introduction:

Welcome to ICT-VG12 Web Design and Development. In this course, you will learn about the fundamentals of web design and development and develop the skills and knowledge necessary to create responsive and visually appealing websites.

Discussion:

In this course, you will learn about the basic concepts of web design and development, including HTML, CSS, and JavaScript. You will also learn how to use web development tools such as text editors, version control systems, and web browsers.

We will cover the importance of user experience and accessibility in web design, and how to optimize web pages for search engine ranking. You will also learn how to deploy websites to a web server and manage web hosting services.

Throughout the course, you will work on several web development projects that will help you develop your programming and design skills and apply what you have learned. You will also learn how to use web analytics tools to monitor website traffic and user behavior.

Conclusion:

In conclusion, this course has introduced you to the fundamental concepts of web design and development and provided you with the skills and knowledge necessary to create responsive and visually appealing websites using HTML, CSS, and JavaScript. You have learned how to use web development tools such as

text editors, version control systems, and web browsers, and the importance of user experience and accessibility in web design.

We hope that this course has sparked your interest in web design and development and inspired you to continue learning and exploring your creativity. Whether you pursue web development as a hobby or a career, the skills you have learned in this course will be valuable and useful for years to come.

Course Title: ICT-VG13 Digital Illustration

Learning Objectives:

Upon completion of this course, learners will be able to:

- Understand the basic principles of digital illustration
- Use digital illustration software such as Adobe Illustrator to create vector graphics
- Apply various techniques to create visually appealing illustrations
- Use color theory to create harmonious color schemes
- Create illustrations for different purposes such as advertising, editorial, and children's books
- Understand the importance of copyright and intellectual property in digital illustration

Introduction:

Welcome to ICT-VG13 Digital Illustration. In this course, you will learn about the basic principles of digital illustration and develop the skills necessary to create visually appealing illustrations using digital illustration software.

Discussion:

In this course, you will learn about the basic principles of digital illustration, including how to use digital illustration software such as Adobe Illustrator to create vector graphics. You will learn various techniques for creating visually appealing illustrations, such as using layers, blending modes, and gradients.

We will also cover color theory and how to create harmonious color schemes. You will learn how to apply different color schemes to create a variety of moods and emotions in your illustrations.

We will also explore the different types of digital illustrations and how to create illustrations for different purposes such as advertising, editorial, and children's books.

Finally, we will discuss the importance of copyright and intellectual property in digital illustration. You will learn about licensing agreements and how to protect your intellectual property when working as a digital illustrator.

Conclusion:

In conclusion, this course has introduced you to the basic principles of digital illustration and provided you with the skills and knowledge necessary to create visually appealing illustrations using digital illustration software such as Adobe

Illustrator. You have learned various techniques for creating illustrations, including the use of layers, blending modes, and gradients, and how to create harmonious color schemes.

You have also learned about the different types of digital illustrations and how to create illustrations for different purposes such as advertising, editorial, and children's books. Finally, you have learned about the importance of copyright and intellectual property in digital illustration and how to protect your work.

We hope that this course has sparked your interest in digital illustration and inspired you to continue learning and exploring your creativity. Whether you pursue digital illustration as a hobby or a career, the skills you have learned in this course will be valuable and useful for years to come.

Course Title: ICT-VG14 Modeling and Production

Learning Objectives:

- Develop basic 3D modeling skills using appropriate software
- Understand the principles of lighting, texturing, and rendering in 3D modeling
- Apply knowledge of 3D modeling in the production of digital content

Introduction:

ICT-VG14 Modeling and Production is a course designed to introduce students to the world of 3D modeling and digital content creation. Students will learn how to use industry-standard software to create digital models and environments, and will gain an understanding of the principles of lighting, texturing, and rendering. Through hands-on projects and assignments, students will apply their knowledge to create their own digital content.

Discussion:

In this course, students will learn the basics of 3D modeling using software such as Blender or Autodesk Maya. They will learn how to create and manipulate digital objects, as well as how to build 3D environments. Students will also learn about lighting and how it can affect the mood and feel of a scene, and how to add textures to their models to give them a realistic appearance.

Throughout the course, students will be assigned projects that will challenge them to apply their knowledge in creative ways. These projects may include creating a 3D model of a character or object, designing a 3D environment, or creating an animation.

In addition to technical skills, students will also learn about the production process for 3D content, including how to plan and organize their work, collaborate with others, and present their final product. They will gain an understanding of the importance of clear communication and attention to detail in producing quality digital content.

Conclusion:

ICT-VG14 Modeling and Production is a valuable course for anyone interested in pursuing a career in 3D modeling or digital content creation. Students will develop essential skills in 3D modeling, lighting, texturing, and rendering, as well as an understanding of the production process. Through hands-on projects and assignments, students will apply their knowledge in creative ways and gain the practical experience needed to succeed in the industry.