Associate Creative Designer
National Vocational Qualification
Level 4 – Curriculum

By

ICT Industry Skills Council

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ICT Industry Skills Council

Program: Associate Creative Designer
NVQ Level: Level 04
Module 01: Performing Edits to Video Production
Duration: 240 hours

Competencies and duration breakdown:

Competencies to be covered

Competencies	Duration
Basics Concepts for Video Editing: Trainees explain how men in early human civilizations tried to show motion using painting. They explain how evaluation of experiencing animated arts has been happening. Further they present and criticize the evaluation of motion pictures, which is identified as a video. Trainees describe and criticize significance & need of editing videos. Students recognize different types of video shots, rules of video shooting and best practices. Moreover, they suggest creative ways of breaking the rules and evaluate the impact of breaking the rules. Students identify the basics editing techniques such as Direction edit, Form Edit, Concept Edit, Parallel edit, Standard, Jump Cut, L cut and J cut, Cutting on action, Cut away, Cross Cut, Montage, Match cuts, 180 degree rule, 30 degree rule, kuleshov effect and etc. Further, they explain the creative usage of Editing Technics. Trainees recognize different types of transitions. Moreover they suggest how transitions can be used creatively and effectively in video editing.	**35**
Production Management Skills: Trainees recognize and use technical terms which are being used in industry. Eg: Cinematography, photography, video editing, Dubbing etc. Trainees recognize the different between Video Production & Video Post-Production. Moreover, Students interfere effectively throughout the video production flow. They demonstrate how to organize and plan a sequence of video.	**15**
User Skills – Editing Tools: Students identify and recommend video editing tools and their capabilities. Eg: Adobe Premiere Pro, Corel Video Studio Ultimate X10, Pinnacle Studio Ultimate, Apple Final Cut Pro X Trainees Recognize the working environment of the selected tool. They demonstrate the availability of tools in working interface. Moreover, they install and customize the software toll accordingly. Students import required media materials including video, audio and images. Moreover, they recognize different frame rates and frame sizes. Trainees organize video clips and other materials in a sequence in the working environment according to the script given/ planned. Students edit videos and give them an attractive finishing. They trim clips, use sound effects & audios effectively and appropriately. Moreover, they use effect, animations accordingly in an attractive manner.	**80**

Trainees export Media in different formats through editing tools. Further they add menus to make the production user attractive and to make the videos presentable	
User Skills in Animation Tools: Trainees identify visual animating tools and their capabilities. Moreover, they recommend visual animating tools. Students create digital motion graphics, visual effects and animations using following functions. - Digital video basics - Digital media management - Layers and compositing - Keyframes and motion paths - Working with and animating text - Working with 3D effects - Rendering and exporting projects	**80**
Professional and Project management Skills: Trainees explain the requirement of the production through identify the audience, purpose and best way of reaching audience. Moreover, they identify the content which should be used to reach the audience. Students understand a script of a film, short film, documentary and a TV commercial. Further, they are capable of understanding the point of view of director, music composer and cinematographer. They can describe the importance of copyright rules and obtaining process.	**30**
Total number of hours	**240**

Typical work related situations

Video editing is used for various purposes in the industries such as TV commercial, filming, Television, Events and Functions, web based marketing & etc. So the range of the typical work related to video editing is huge. Developing technical skills would be easy, but a creative mind which can attract people has better opportunities in the industry.

1. Client is looking to do an online marketing campaign and company has decided to create some motion graphics.
2. Company is producing a TV commercial for insurance company and you have been asked to discuss the story line of the TV commercial with director, cinematographer and the music composer.
3. Senior 3D animator is sick and company wants the trainee to take over the partially developed work.
4. Cinematographer and director explain the nature of a video which is going to be created using typical technical terms.
5. Company is asking your opinion on a video creation which the client is not satisfied with.
6. Production manager is absent and you have been asked to help the business analyst to help him for budgeting.

Important pertinent Content (Knowledge Areas)

Competencies	Knowledge Areas
Basics Concepts for Video Editing	− Early trials in human civilization for showing the motion through drawings. Eg: Paleolithic cave paintings, Egyptian burial chamber mural, History of photography and motion pictures - Forms of animated art before usage of digital/computer based technologies - Alphabet of shots, rules of shooting, camera angles, camera movements - Basic editing techniques such as Direction edit, Form Edit, Concept Edit, Parallel edit, Standard, Jump Cut, L cut and J cut, Cutting on action, cut away, Cross Cut, Montage, Match cuts, 180 degree rule, 30 degree rule, kuleshov effect and etc. - Common Transition types and relevant usage
Production Management Skills	- Video production planning and management process
User Skills – Editing Tools (Preferred tool: Adobe Premier)	- Moving, deleting, adding, trimming in the time line - Using audios - Overlaying clips - Transitions - Cuts - Rendering - Creating DVD menus
User Skills in Animation Tools (Preferred tool : Adobe After Effects)	- Layers and their options and creating a layer solid - Layer switches - Time stretch and frame blending - Nesting compositions/layers using - Using precomps - Animating layer properties - Motion paths - Layer blending - Controlling the speed of animations - Learning the easing principles - Using the Character and Paragraph palette - Animating text with keyframes - Animating text using presets - Masking - Animating masks - Working with alpha channels - Track matte - Effect basics - Animating effects - Rendering to various formats - Understanding the render queue

	- Render settings & formats - Render queue duplicating jobs Creating render templates - Exporting a project file
Professional and Project management Skills	- Basic formats of script writing - Copy writes - Working Ethics

Potential useful Teaching Methods

Competencies	Method of Assessment
Basics Concepts for Video Editing	- Use video materials to show the evolution of animated art and evolution of motion graphics. Use activities to show how motion is detected by human eyes. - Show an edited and unedited version of the same video and evaluate the need of editing. - Provide few video materials to a group of students and ask them to evaluate the editing need - Suggest a creative way of breaking basic rules of shooting and ask them to evaluate the impact happened through breaking the rule. - Show video for each video editing technique. Ask student to name the editing techniques used in another set of videos. - Show the usage of transition using videos. Ask students to propose appropriate transition types for a video and criticize it. - Technical terms that are being used in cinematography, editing, dubbing and audio engineering.
User Skills – Editing Tools	- Do a comparison between available video editing tools. Evaluate the user-friendliness and capabilities. - Discuss the importance of basic editing techniques and functions. Moreover, make a discussion among students on using editing functions for a creative production. - Divide groups and ask them use three animating methods for the same scenario. Ask each group to present while giving the audience to criticize - Ask students to shoot some photos and videos by his own and create a 1 min video on an event conducted during his academic period. - Ask students to add menus to make their production user attractive and to make the videos presentable
User Skills – Animation Tools	- Ask students to create an animated promotional video for the 'tech-day' of their training college us - Show students an animated video created using motion graphics and discuss how motion graphics can be used in social media for promotions. - Ask students prepare a motion graphic to present the content of the course they follow.

Professional and Project management Skills	- Group students ask them to plan and write a concept (short) for a tv commercial or a social media (video) for promoting different products (Foot wear, cosmetics, education institute, pension plan of an insurance company, chocolate). Ask them to present how they are going to get the attention of the audience. - Group Students and provide art based materials (videos with artistic values) advertising based (commercial purpose) and ask them to criticize the creation in terms of expressing the idea (for art based) or reaching the audience (commercials).

Required Skill set

Competency Area	Competency
Basics Concepts for Video Editing	Understand and comment on the history of motion picture Explain and criticize significance & need of editing videos Recognize different types of video shots Recognize and use technical terms in cinematography industry Recognize and explain the creative usage of Editing Technics Recognize the transitions and identifying different types of transitions Explain the creative usage of Transitions
Production Management Skills	Recognize the different between Video Production & Video Post-Production Demonstrate how to interfere effectively throughout the video production flow Demonstrate how to organize and plan a sequence of video
User Skills – Editing Tools	Identify and recommend video editing tools Identify the necessary sequences, frame rates, frame sizes Importing videos, audios, images & etc. Perform editing Creatively Export Media in different formats through editing tools Add menus to make the production user attractive and to make the videos presentable.
User Skills in Animation Tools	Identify and recommend visual animating tools Create digital motion graphics, visual effects and animations.
Professional and Project management Skills	Identify the audience, purpose and best way of reaching audience. Identify the content which should be used to reach the audience. Understand a script of a film, short film, documentary, TV commercial Understand the point of view of director, music composer and cinematographer. Describe the importance of copyright rules and obtaining process.

Program: Associate Creative Designer
NVQ Level: Level 04
Module 02: Game Designer and Developer
Duration: 300 hours

Competencies and duration breakdown:

Competencies to be covered

Competencies	Duration
Pre Gaming Skills: An opening for candidates to acquire the knowledge of game theory and further unpacking the basic skill set to understand the principles that goes to make a game. Ability to play non digital games, like as chess, tic-tac-toe, rock-paper-scissor payoff, cards…etc. further the candidates will be taken through basic history of how game design and development really was started and a few key personnel behind the history of games. The candidates also need to be given guidance on mathematics to cover areas such as geometry or the study of shapes, vectors to represent a point and about transformation that will move an object from one location to another. Further a simple knowledge of graphs to determine the game strategy. The candidate will also need to possess a few programming skills such as program variables, data structures, control structures and also functions in programming using C# (C Sharp) would be ideal.	**40**
Game Designing skills: defining what a game is? Crafting a game concept is an essential knowledge for the candidate. The candidates must be creative in coming up with an idea that's unique and further need to identify the target audience who would really be interested in playing the game once developed. Determine what platform the game will be designed and developed on such as game console (Xbox one, PlayStation 4), PC based, Phone or tablet Apps, Web browser based games. Identifying the different game genres and further determine the gameplay that will allow the players to connect with the game. Candidates need to identify the visual style that needs to go into the game, such as the forest, a dark cave…etc. the candidate needs to identify what characters will be involved in the game. E.g.: a big bear, tarzan…etc. make the candidates understand the story behind the game and further be able to write the story, normally called as storytelling, which needs to be developed. It is also important to note the sounds that needs to go into the game, such as roar of the bear, singing of the birds, sound of the nearby village. Candidates also need to design the levels of the game using achieving flow, pacing and balancing. The candidates must generate the required skills to structure the game using tight concept. The candidate needs to be aware of adding fun mechanics into the game. The idea of designing reactive controllers, the candidate also need to add aspects of motivation and reward so that players will be more engaged in playing the game. Use of virtual currency also needs to be added when implementing a game. Candidates also need to gain an understanding of auction houses. Understanding common game mechanics such as puzzles in games such as Tetris, combat games such as Halo and injustice2 and also simulation games that uses the mimic real life experience for a player such as the SIMS 4, planet coaster and allowing the player to	**100**

understand role playing games. Making the candidate understand and apply the mechanics and gimmicks into the design. Further allowing the candidates to be knowledgeable about games with victory conditions, game over condition, games with never ending story games. Ensuring candidates are aware of playtesting and aspects of usability testing. Further ensuring that the visual design of the system is better provided to candidates.	
Game Development skills: understanding the Unity 3D software components such as scene view, the game view, hierarchy , the project view and the inspector panel. Identifying the game objects and the components that make up the game objects in Unity. Further learn how to add, remove, copy and paste components and scripts for specific objects. Understanding the prefabs, which are preconfigured game objects that are created in the scene and stored in the project. Further how to clone or instantiated prefabs during the game. The candidate needs to also know how to manipulate a prefab during the game. How to create tags and further assign tags to objects and further connect the tags with the code is also essential skill for a candidate. The candidate also needs to be skilled in creating and managing layers when developing games. The candidate needs to learn how to create a new project in unity, import the assets needed for the project, save the main scene and further set up the basic foundation for our game. Also having an understanding of build targets when developing game. After setting the build target the candidate needs to be skilled in manipulating the player settings including resolutions, aspect ratio. Further after setting the scene for the game the candidate needs to be aware of adding players into the scene from the asset registry. Further the candidate needs to be aware of manipulating the game objects in the scene when developing the game. How to add physics into the game object and further how to work with the physics engine for the defined game object is also essential. Understanding the colliders in physics is another import skill. Adding a camera and further connecting the lights, camera to the game object using a script. Candidate need to also have programming skills in C# when scripting during the game development process. The candidate needs to acquire skills to set up the play field, setting up other objects like trees in the jungle, mountains or even a wall around the main game object. The candidates also needs to be aware of how to create collectable objects and further how to pick up these objects when further developing the game. The candidates also need to be able to include kinematics to the game objects. when deploying a game such as a space ship battle the space shit needs to shoot numerous objects that comes on its way and therefore the candidates needs to acquire the skills for creating shots and how to shoot using these shots (shooting shots). Counting, displaying text and further ending a game needs to be incorporated to make the game work and finish successfully. Once the game has been successfully built the candidate needs to deploy the game on the selected built targets. Basic introduction to 2D game objects and how to design, build and execute a simple 2D game.	**160**
Total number of hours	**300**

Typical work related situations

Pre Gaming Skills: the candidate needs to think of a domain to design a game to entertain people and at the same time give them knowledge in practical aspects of life. The supervisor/ employer will ask the student to make the concept for the game. The skills acquired from the history of games and very especially from the game theory will have to be used to create the concept of the game. The company will also want this game to be popular and further in the long run generate income and profits to the company. Therefore the candidate needs to think of a strategy to make this game popular and how it could further be a revenue model for the company. The employer also wants to ensure that the game you intend to develop is based on a simple but yet a comprehensive logic.

Game Designing skills: The company you work for has assigned you to design and develop a simple game of cricket. The player's team will be batting and will have to score the given runs within a given number of overs. The game will be targeted to have a completion once the runs are scored or if all the wickets fall before its scored or if the overs are completed before we score the runs in full. The target audience would be busy employees who needs a quick break at a stressful day of work, housewives just at a free time, kids who will value a short game that will have a win condition. The game could be played on PC or mobile, that is Android and even iPhone. The game therefore will be considered as an entertainment game and also can be called a sports game too. The game area would be a cricket ground and the cricket pitch. The game design needs to have in the background the audience, scoreboard, and sky. The characters for the game will be your team (player's team) and we will consider the players as magpies and the opponents as crows. The candidate then has to make the story for the game such as the crows will score 60 runs in 5 overs and the magpies' needs to get the score within 60 balls. The shots will give the magpies runs, it could be one, two four or six. The crowds will cheer each time a four or a six will be hit. The sounds for the game is for the cheering and when a wicket would fall. The game needs to be developed only for a single level and your team does not bowl. The fun mechanics is how the ball will be bowled and the shots you place will be based the time you strike. The candidate needs to consider about the simplicity of the game design and how it would release stress of the target audience.

Game Development skills: The candidate will use Unity 3D to develop the game, which he/she has designed under the previous module and further will need to identify and select the build target under which the game needs to run. When developing the game C# will be used for the scripting of various components in the game. Substantial knowledge of the software is essential for the development of the game and the candidate can further acquire knowledge from referencing https://unity3d.com/learn/tutorials/projects which consist of a comprehensive set of tutorials for developing simple games. The knowledge of physics will be an important area since the kinetics of game objects needs to be understood and implemented with proper consideration. The real knowledge of the game of cricket as per to the discussion in the previous module needs to be highly focused since programs needs to be connected with the motion of the players and other objects such as ball, bat, wickets…etc.

Important pertinent Content (Knowledge Areas)

Competencies	Knowledge Areas
Pre Gaming Skills	How practically the game theory is applied in a few games, such as Angry bird or even a simple cricket game. Basics of the mathematics needed such as of vectors, different shapes and further how transformations can be applied to different game objects. E.g.: the movement of an animal will be different from the movement of a space shuttle. The candidate needs to have sound knowledge of physics. The game theory needs to be studied and further need to be applied in the formation of a game
Game Designing Skills	The candidate needs to have knowledge on the game play theory that will indicate how the game player will be interacting with the system in order to play the game. The candidate also needs to possess the knowledge in art, design and animations that will help to design the visual effects of the game and can be game objects and game environments. The candidates need to be able to have the knowledge to draft a story using paper and pencil, the candidate needs to have a good knowledge on board game designing and further how to pitch the game. This is the elevator pitch, which tells someone enough about your game for them to make a judgment in the shortest amount of time possible. An important section of game designers knowledge is to complete the game settings, game rules into a game design document (GDD) before starting to develop the game. The candidates design and develop games using SCRUM method and therefore sprints, sprint planning, sprint execution, sprint review and sprint retrospective would need to be practically applied. The candidates also need to acquire knowledge with regard to project management, that is project planning using network diagrams or even Gantt charts using Microsoft Project or any suitable software for project planning.
Game Development Skills	The candidates need to be able to perform the tasks listed under the competency area and to develop the designed game using Unity 3D. further they need to possess a good understanding of unreal engine ver 4.0, used to develop games with the concept of blue printing for the purpose of 3D game object development, however the candidate need not develop a 3D game using unreal engine since it will be apart of the NVQ Level 05 curriculum. The candidates need to be given a good knowledge of the BuildBox software for gaming, since it minimizes the coding effort that is available under Unity 3D and further making game designing very much easier.

Potential useful Teaching Methods

Competencies	Method of Assessment
Pre Gaming Skills	Ask the candidate to play a paper game such as tic-tac-toe with another player for them to understand the concept of a game, make them understand that games can be over. Also make them understand that some games can even continue for many cycles or even forever. In simple terms make the candidates play a boardgame such as ludo, snakes and ladders for them to understand how a game player thinks and plays. Ask the candidates to come up with a simple game and make them present the idea of the game. Give the candidate an assignment to draw simple objects on paper using basic shapes, such as a rabbit, house, plane…etc. further make the candidates plot a graph for the basic movements of dynamic objects such as rabbit, plane…etc, this uses the knowledge of physics.
Game Designing Skills	As an assignment make the candidates form into groups of four and first take the ideas formulated in the first section into a story and make the group tell the story/write the story as a script, ask them to think of the characters of the story and further identify the features that need to go into the characters, such as cruel, innocent, funny, ugly and any sounds that need to go with it, like roar, yelling, laughing…etc. further tell the group to identify what the game objects need to do in terms of transformation, such as jumping, running, punching, kicking…etc and also consider the aspect of the environment and how it should basically appear, such as jungle, inside an office, in the zoo, in the sea, in space…etc. ask the candidates to design the game by focusing on the fun mechanism, that it how the game player can enjoy the game rather than get stressed by playing the game. Ask the candidate to relate the story they have made to another independent panel to identify if the game is really interesting to build or if not how well we can improve it to make it better game.
Game Development skills	Make the students develop the game using software such as Unity 3D and make this as a gaming competition where the respective groups will be developing the game they have designed under the previous section. When developing the game the team members must include the aspect of the game object, show how the game uses the physics engine in Unity, and further how to include lighting and camera for the game object under development. The candidates need to also include scripting using C# programming under Unity. The best game will have to selected based on how much of features are being included into the game, does the game have the fun mechanics needed to be a winning game and what's new in the game, have the team copied the idea from another game currently available or have they really developed a novice game from scratch. Further the center can have a Hackathon to design and build a simple game in a small time period using BuildBox to make the candidates learn the process of real world implementation of SCRUM.

Required Skill set

Competencies	Skills needed
Pre Gaming Skills	Creative skills, conceptualization skills, logical thinking skills, gaming skills, game theory understanding skills and application of game theory, analytical skills, minmax theory understanding skills, marketing skills to identify how best we can place the game in the market.
Game Designing Skills	Creative skills, problem solving skills, character designing skills, scene designing skills, technical skills, storytelling skills, people skills to identify how the game will fit the target audience, visual designing skills, game object designing skills, audio skills that will enable to identify which sound suits which situation
Game Development Skills	Game development skills, programming skills, logical thinking skills, skills in lighting and camera of game development using Unity 3D software, skills in manipulating objects in the game, skills in object kinetics which will provide the ability for the objects motion, virtual currency skills to apply how the game will generate currency, while playing.

Program: Junior Creative Designer
NVQ Level: Level 04
Module 03:   Graphic Designer
Duration: 240 hours
Competencies and duration breakdown:

Competencies to be covered

Competencies	Duration
Making a Design real: this will give the candidate basic knowledge of the design basic and an understanding of the design vocabulary available. This section also allows to obtain an overview of what typography is and the integral role it plays in graphic design. This section will also focus on learning the critical elements and principles of color that create meaningful design	**10**
Photography for graphic designing: the candidate needs to know how to shoot photography as a graphic designer, further the candidates need to acquire how to source photographs from online stocks. Different resolutions and file formats of photography. The candidates will also gain the ability to create an impacting photographic compositions. Further this section will give ability to crop and manipulate photographs to enhance meaning.	**20**
Logotype designing: Through the creative process the candidates will be able to learn how to make creations and the ability to generate, analyze, edit and refine concepts. further They will also learn how to manipulate letterforms to create legible, well crafted, dynamic and meaningful word-marks. Thereafter the candidates should be able to variations to the logo so that it could be placed at different back grounds.	**30**
Design Systems for Marketing : The candidate will be able to design marketing material such as a double sided leaflet, a full color newspaper advertisement design, a pennant, a banner and even a medium sized holding by using the skills he/she has acquired using the first three chapters/ sections of this syllabi. The candidate therefore needs to acquire the knowledge of how to place color on a text and graphical design, how images needs to be processed prior to inclusion to the design, placement of text and images, how to apply background color, themes…etc.	**120**
Design Systems for Corporate/Business: The main skills needed would be the ability to design multiple page layouts such as for a twofold brochure, corporate booklet, a magazine or something equivalent. This module would provide the candidate to produce a portfolio of the designs into one unified book.	**60**
Total number of hours	**240**

Typical work related situations

Making a Design real: candidate needs to design numerous things at his/her new office, he is given the corporate colors to start with and asked to think of how to start the designs of the company to have a total uniform look. He/ she also needs to get the thought process of the stakeholders of the company to identify on the typography that will best suite the company. It is also important to identify the theme and the concept that will best suite the overall design of the company.

Photography for graphic designing: to make a total difference in the corporate interior and later on the exterior the company asked you to take pictures most appropriate in order to add on to the gallery to be used for the total new look of the company. However the photos needs to be taken in their natural environments and further edited to include numerous inclusions. Such as shading, readjusting, color changes…etc. this will make the photograph ready to be implemented into any design.

Logotype designing: The company needs to make their own logo. Assume it's a fast food outlet that sells pizza and they need to make a logo for the company. The candidate is given a picture of the pizza and asked to make a logo similar to the pizza to indicate that the company is in the business of pizza. The candidate will have to apply shapes, color and text to make the logo design. The company also asked the candidate to make the logo usable in different points such as for a pizza delivery teams T-Shirt, corporate web site and on the pizza packing box. And also on the main name board in front of the shop.

Design Systems for Marketing: the candidate is given more responsibility now to do the full marketing campaign and design for the enterprise. He/she now has to use the logo, which was designed before and complete a double sided leaflet, which indicates about the company, what the company offers to its clients…etc. further the candidate is asked to perform a marketing campaign and therefore needs the design of a few pennants, banners and even a holding design. The candidate needs to use the knowledge he/she has gathered in the previous modules to edit high resolution photographs in order to complete the design.

Design Systems for corporate / business : the candidate is now asked to make a corporate handbook, which needs to have the company overview, message from the chairman and few other important personnel, company vision, mission, purpose and values, also include products and services offered to its clients, company CSR projects, the companies employees…etc. this handbook needs to be designed and the candidate should ensure that the book is printed by an outsourced company and therefore need to liaise with such a company for final production. It is the responsibility of the candidate to ensure that the computer design is exactly what is being produced, in form of color and layout…etc

Knowledge Areas to achieve the competencies

Competencies	Knowledge Areas
Making a Design real	The knowledge of pictures, designs, drawings and how they are been drawn and what tools can be used to do what aspect of design needs to be known at this level. Such as Adobe PhotoShop CS and CC versions and what Photoshop would be best used for, Adobe Illustrator CC and what would be the exact purpose of using such software and what would be the difference of Photoshop and Illustrator. Adobe InDesign and its use. Further a glimpse of Coreldraw and its usage can be briefly acquired.
Photography for graphic designing	Knowledge needed would be how to take a photo using a mobile, Digital camera or DSLR. The knowledge of using different lenses for different photo shoot would be also a required skill, which is taught under video editing section. Further how to open the photo in PhotoShop CC and then use of the crop tool to resize the photo and also the knowledge of using the straightening tool to straightening any crooked section of the photo. Also the candidate needs to have the knowledge to save the edited photo with the layers. How to use the hue/saturation adjustment layer to adjust the color. How to use the brush tool to shade and adjust colors. Know how to use spot heeling brush and patch tool to remove unwanted objects in a photo. Knowledge to use the blur filter to make the photo more creative. Further use of the adjustment layer to make the color photo black or white and further teach how to tint a photo. Finally learn how to sharpen an image and to save the photo under different formats. All these features would be applicable with the knowledge from Adobe PhotoShop Cs or preferably CC versions
Logotype designing	The knowledge of deconstructing an image into simple shapes. Each logo needs to be easily recognizable and memorable. Using illustrator CC, which uses vector graphics the candidate can gain knowledge how best to design a logo. Knowledge to open a new file and perform the page settings. Know how to use layers in illustrator, further use of shapes and also reshape the elements added to design a basic logo. Drawing freeform shapes would also be required. Knowledge to explore the colors from the libraries and further how to apply different colors and further how to apply the stroke of a shape. The candidate needs to have the knowledge to add text into the logo design. Know how to select the standard fonts or fonts from the typekit library in illustrator. Further the knowledge to format the font by character spacing, resizing, change text color…etc. finally learn how to save a file into Pdf format or even to be used in web.
Design Systems for Marketing	Using Adobe Photoshop CC learn how to use layers for designing a flyer. Know how to use the marque tool in selection of an area. Application of the knowledge of the designed logo into the flyer and further edited photos from the second module and also insert text, format text, add color to text. Place the content in the appropriate places of the flyer. Gain and apply the knowledge on how to create a flyer where content can be applied on both sides of the flyer. Ensure that the flyer is designed and saved in such ways that would be easy for the production team to produce the required number of flyers, which would be also economical.

Design Systems for corporate / business	Candidates need to know how to use Adobe InDesign CC to create a text heavy publication using reflowable EPUB. Provide the knowledge for making a more complex design by exporting into fixed-layout EPUB. Further knowledge of selecting fixed layout setting and also adding viewing Apps to publish these EPUB for public use.

Potential useful Teaching Methods

Competencies	Method of Assessment
Making a Design real	The lecturer needs to teach the design vocabulary using practical examples, example to differentiate between raster image data and vector image data we could take a simple example like a photo from the camera and the vector graphics in Google maps. Explain in detail about the color pallet for the students and further how to use color appropriately in a design, color matching and color balancing needs to be taught. To teach typography give the knowledge candidate a good knowledge for different fonts and where each font is best suited to be used. When teaching a creative subject as this it would be also a great idea to give them to draw a concept on a piece of paper for a given topic or even a thought. E.g.: give a picture of rich and poor, parents…etc. these drawing will enhance the creative thinking of the candidate, it is then we can include the required tools to make that creation a marvel.
Photography for graphic designing	Train the students to take a photograph it can be from a mobile phone, can be from a digital camera or from DSLR camera, give the students and idea of what GoPro cameras are as well. After the photo is taken students can be taught to crop the picture and resize if required, improve lighting by adjusting colors, further teach the students to remove unwanted content from a picture, further how to add creative affects and save the changes.
Logotype designing	The candidate needs to be taught how to use Adobe Illustrator CC to use shapes in designing to logo, guiding them to change shapes, add and modify colors in the logo and also add text and further change the colors and format of text in the design. Ask the candidates to make three logos, one a picture is given to them and they are asked to make a logo which looks like the picture from his/ her view point. Secondly ask the candidate to design a logo for a company where the full background is given as to what they do, what they sell, what values and culture they adapt….etc. and finally give the candidate to design a logo for a given statement. E.g.: unforgotten taste of pizza, the journey that never ends..etc
Design Systems for Marketing	Ask the candidate to make a flyer for the company or even an event. Teach the candidate how Photoshop CC can be used for this purpose and further give them an assignment to design a flyer to promote an event. E.g.: a cycle race to generate funds for an elder's home. Make this designing as a small competition among students and ask them to submit the design within a few days. Thereafter the best design can be selected and appreciated. Also give the candidate to design a flyer for a company/ business, this will allow the candidate to differentiate how an event flyer and a business flyer needs to be done.
Design Systems for corporate / business	The candidates can be given a task to make a booklet for the company or even a booklet for the center that they studying at. Educate the candidates how Adobe InDesign can be used for this purpose and further ensure that they have a clear knowledge of the new features of InDesign why it's better to be use that Adobe PageMaker. Ask the candidate to ensure the designs are compatible with the production team's requirement and further train the candidate to make the design to be published electronically.

Required Skill set

Competencies	Skills needed
Making a Design real	Conceptual skills, creative skills, listening skills, ability to look at things differently, understandability of tools and usage
Photography for graphic designing	Camera usage skills, photography skills such as taking a photo, focus, clicking at the right moment. Photoshop skills in photo editing, creative skills, ability to select the best photo to be edited is also essential.
Logotype designing	Ability to use Adobe Illustrator to design a logo, using shapes, color and text, conceptualizing skills, creative skills, designing skills, collaboration skills since it is required to liaise with different stakeholders to obtain certain information/ data, aesthetics skills.
Design Systems for Marketing	Ability to use Adobe Photoshop to design a flyer, communication skills to better understand the design, creative skills, aesthetics skills, production process skills in order to know how the design needs to be saved.
Design Systems for corporate / business	Creative skills, communication skills, aesthetics skills, skills to design using Adobe InDesign, editing skills, publishing skills

Program: Junior Creative Designer
NVQ Level: Level 04
Module 04: UI/UX Designer
Duration: 120 hours
Competencies and duration breakdown:

Competencies to be covered

Competencies	Duration
Initializing User Interface Design: the candidate must be able to understand how humans think when comes to user interface usage. They need to know how human sensors work when using user interfaces. The candidates must be able to observe different user interfaces and obtain a broad knowledge of how each interface needs to be different from others. Conceptualizing a solution based on the given problem or idea in order to design a user interface would be also an essential skill in this section.	**20**
Analyzing user's interaction needs: the candidate must be able to analyze in detail as to why users need an User Interface (UI), studying the user's mental model and identifying what different users likes and dislikes in concern with user interaction. The candidate must generate a business idea and further analyze the User Interactions according to the business direction. The analysis needs to cover the detailed domain analysis, functionality of the User interface, task analysis of users to obtain an in-depth knowledge of what types of UI's needs to be designed for a particular system.	**35**
Designing User Interactions: the candidate needs to be aware of the characteristics of good user interface design and how to apply them into real world designs. The candidate needs to be able to convert his/ her findings to designing the user interfaces. Candidate should have the ability to design the user interfaces for different screen sizes, especially for desktop/ laptop and mobile. The candidate needs to apply color, layout, and context when designing the user interface. Further the candidate needs to also be focused on the designing of user interface for disables or rather partially able personal using such user interfaces. The candidates need to be competent also in the designing and the redesigning process with regard to User interface designing. Candidates needs a basic skill on different interactive media. Further the User Experience(UX) needs to be further extend to basic real world examples	**45**
User Interface Evaluation: once the user interface is designed the candidate needs to ensure it is connected with a working model of a system and further all users can understand and further use the system through the interface to accomplish their intended work. The candidate must be able to evaluate the user interface using the usability evaluation guidelines. Perform a design Critiques with other team members to identify what needs to go in to the design is actually included. Evaluation of user interfaces under different platforms, different environments to ensure that the intended UX is really gained.	**20**
Total number of hours	**120**

Typical work related situations

Initializing User Interface: candidate is asked to design a user interface for a system, which is used by internal and external users of the company. He/she finds that each user has his/her preferences with regard to user interfaces and further learns that they need interaction in different ways. The company wants to implement an user interface that also meets standards recognized globally. Depending on the company the candidate needs to determine what kind of user interface will best suit them. Drawing up the concept or thinking behind the user interface is also required.

Analyzing user's interaction needs: Prior to converting the identified concept to the user interface the candidate is asked get a through incite of the domain of the enterprise for which we intend to design the UI, candidate also find s that this UI will not only be used by one user and several users and user roles will be focusing on using the user interface to accomplish specific tasks and the role analysis and the task analysis for the specific situation needs to be identified.

Designing User Interactions: The candidate now has to design the user interfaces for different screen sizes, especially for desktop/ laptop and mobile. While doing so needs to apply color, layout, and context to make the user interface appealing to the users. Using the different principles acquired for user interfaces and usability is another essential need at his/her work place. The company also makes the candidate aware that the graphical user interface (GUI) can be also used by partially impaired personal or even personal with serious disabilities and therefore the design that needs to be compiled needs to incorporate all such needs.

User Interface Evaluation: the user interfaces of the system is in place and the candidate has been asked to validate the user interface. In order to perform this validation the candidate shares the user interfaces with a potential user group for beta testing and when a proper confirmation is acquired he/ she will pass it on to the real users to be tested and evaluated, this is known as empirical evaluation of user interfaces. Prior to being tested by potential or even real users the candidate needs to ensure the UI has been designed under the proper usability guidelines and standards recognized globally. This is known as heuristic evaluation. Several team members are asked to sit together and criticize the user interface to obtain even the most sensitive mistake of the UI

Knowledge Areas to achieve the competencies

Competencies	Knowledge Areas
Initializing User Interface	Communication would be essential, since we need to conduct an initial interview to obtain a system brief. To initialize a user interface for a system the candidate can user sample user interface designs available in web as templates for users to formulate the concept of a user interface design. Once the idea is formulated the user interface will have a quick design using a design tool such as Photoshop CC for web, UI/UX designing and mobile app designing to manage raster graphics and also illustrator CC to manage vector graphics.
Analyzing user's interaction needs	Use the PACT analysis to analyze the needs of the system. This includes People, Activities, context and Technology analysis. Use of the Cognitive Task analysis (CTA) to measure how the user task model is applied. Use of low-fidelity and high-fidelity prototypes to depict the functional requirements of the system and the user interface. Ideally paper prototypes are quite popular for constructing a low fidelity prototype. For high fidelity prototypes www.marvelapp.com. To determine the system overall UML use case diagrams and further to illustrate the systems passing of messages a sequence diagram would be ideal.
Designing User Interactions	Use of interface mockups using software's such as Marvel or even pencil are good for wireframes designing. Designing for desktop, laptop and mobile user interfaces needs to be covered. Design must be applicable to even the latest of designs. All the candidates must be thorough with user interface design principles and ensure their applicability into systems
User Interface Evaluation	A cognitive walkthrough can be used to evaluate the users cognitive behavior when using an user interface, further a functionality test needs to be done to ensure that the user interface does nothing unexpected. https://www.invisionapp.com/ allows us to upload the designs that can be validated by a different user online. The candidate will then learn how to use collaborative software when working as a team

Potential useful Teaching Methods

Competencies	Method of Assessment
Initializing User Interface	Candidates needs to be educated with regard to the working of the three main human senses, such as vision, hearing, and touch (haptic also termed as the sense of touch). Provide the candidates with a real user interface and further make them understand the HCI model that was introduced by Don Norman. Provide the candidates different user interface situations to determine the interaction styles, which best suits the user interface. Candidates can be given a few real world objects to identify and think how it can be done better.
Analyzing user's interaction needs	Give the candidates five different types of systems and make them determine domain specific requirements, further for each of these situations allow the candidates to perform a detailed study and identify at least five user roles under each domain. Further the candidate can be given different mobile apps to go through to determine how the user interfaces are designed. E.g.: how to book a taxi using PickMe, how the Google maps has been done to determine the traffic congestion.
Designing User Interactions	Illustrate at least 5 different user interfaces, which have a bad UI design and ask each student to identify what they are and further ask them to suggest how differently they can design the user interface, using the know principles provided about user interface designing. A competition can be created among the candidates for the best design of the user interface within a given time frame. Ensure that the candidates has good knowledge of different tools to support the design to be reused and further delivered fast.
User Interface Evaluation	Use the CAC approach (Capture, Analyze and Critique) approach to always evaluate an user interface. Ask each candidate to evaluate the interface of others. Ensure that each user interface has EES(effectiveness, efficient and satisfaction of the user interface.

Required Skill set

Competencies	Skills needed
Initializing User Interface	Conceptualizing skills, creative skills, problem solving skills, visual communication skills, critical thinking skills, user research skills, interaction design skills, interpersonal skills, usability skills
Analyzing user's interaction needs	Creative skills, usability skills, problem solving skills, aesthetic skills, visual communication skills, task analysis skills, user research skills, interaction design skills, interpersonal skills, usability skills, media skills, tool skills, technical skills., team management skills , sketching and wire-framing skills, problem analysis skills
Designing User Interactions	Conceptualizing skills, creative skills, usability skills, problem solving skills, aesthetic skills, visual communication skills, Digital design software skills such as PhotoShop, Sketch, Illustrator, Pencil , critical thinking skills, prototyping skills, responsive designing skills, wireframing skills, task analysis skills, user research skills, interaction design skills, interpersonal skills, usability skills, media skills, tool skills, technical skills., team management skills , sketching and wire-framing skills
User Interface Evaluation Skills	Critical thinking skills, usability skills, analytical skills, business achievement skills.