

MODEL CURRICULUM



**Qualification Name: Graphics & Web Designer
Assistant**

Qualification Code:

Version: 2.0

NSQF Level: 4.0

Model Curriculum Version: 2.0

Submitted By:

MSME TECHNOLOGY CENTRE

O/o DC MSME, Ministry of Micro, Small and Medium Enterprises

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NOS / MODULE TEMPLATE

NOS /Module: Mastering the fundamentals of Art and Illustration

NOS /Module Code: MSME/GWD/01

Outcomes:

After completion of course Student should be able to:

- Upon successful completion of the Art and Illustration course, students will emerge as proficient artists with a focused expertise in the field of illustration.
- They will have honed their artistic skills, including drawing, painting, and digital illustration techniques, equipping them with the ability to craft captivating visual narratives.
- Students will have developed a deep understanding of visual storytelling, enabling them to convey complex ideas and emotions through their artwork.
- Their knowledge of design principles and composition techniques will ensure that their illustrations are not only aesthetically pleasing but also conceptually strong.
- Furthermore, they will have the capacity to adapt their style to meet the demands of a variety of clients and industries, from editorial and publishing to advertising and digital media.
- his course empowers students to pursue a career in illustration, armed with a portfolio that showcases their artistic prowess and a firm foundation for creative success in the professional world.

Theory Hours: 30

Practical Hours: 60

Theory Marks: 50

Practical Marks: 50

| Unit No. | Unit Name | Unit level outcomes | Contents (chapters/topics) | TR Hours | PR Hours | TR MARKS | PR Marks |
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| 1 | Introduction | <p>1. Learners will be able to navigate and utilize basic features of Adobe Illustrator.</p> <p>2. Learners will have successfully installed Adobe Illustrator on their devices.</p> <p>3. Learners will demonstrate familiarity with the interface and basic functionalities of Adobe Illustrator.</p> <p>4. Learners will understand the importance of Adobe Illustrator in the context of art and illustration.</p> <p>5. Learners will be prepared to move on</p> | <p>·Welcome to Adobe Illustrator</p> <p>·Installing Illustrator</p> | 1 | 2 | 1 | 1 |

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| | | to more advanced topics in subsequent units. | | | | | |
| 2 | Quick-Start Exercise | <p>1. Learners will demonstrate proficiency in setting up a new document in Adobe Illustrator.</p> <p>2. Learners will be able to navigate through basic setup options including document size, orientation, and artboards.</p> <p>3. Learners will understand the purpose and significance of different setup options for various illustration projects.</p> <p>4. Learners will apply basic drawing and editing techniques through a guided walk-through exercise.</p> <p>5. Learners will gain confidence in utilizing essential tools and commands within Adobe Illustrator to create simple illustrations.</p> <p>6. Learners will be prepared to apply the skills learned in this unit to more complex projects in subsequent units.</p> | <ul style="list-style-type: none">·Walk-through setup·Walk-through | 1 | 2 | 2 | 2 |
| 3 | The Illustrator Environment | <p>1. Learners will demonstrate an understanding of the Adobe Illustrator workspace, including the main interface elements and their functions.</p> <p>2. Learners will be able to identify and utilize various panels in Adobe Illustrator for different purposes such as layers, tools, and color.</p> <p>3. Learners will develop proficiency in panning and zooming within the Illustrator workspace using different methods including keyboard shortcuts and navigation tools.</p> <p>4. Learners will effectively utilize the Navigator panel to navigate and manipulate artwork within larger documents.</p> <p>5. Learners will demonstrate improved efficiency and productivity in navigating</p> | <ul style="list-style-type: none">·The Illustrator workspace·Panels·Panning and zooming·Using the Navigator panel | 1 | 2 | 2 | 2 |

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| | | <p>and working within the Illustrator environment.</p> <p>6. Learners will be equipped with foundational skills to explore more advanced Illustrator techniques and workflows in subsequent units.</p> | | | | | |
| 4 | Selection | <p>1. Learners will demonstrate proficiency in using various selection tools available in Adobe Illustrator, including the Selection Tool, Direct Selection Tool, and Lasso Tools.</p> <p>2. Learners will understand the differences between each selection tool and when to use them effectively for different illustration tasks.</p> <p>3. Learners will be able to make precise selections using the Direct Selection Tool to manipulate individual anchor points and paths.</p> <p>4. Learners will master the use of Lasso Tools for making freehand selections and selecting specific areas within an illustration.</p> <p>5. Learners will explore and apply automatic selection techniques such as Magic Wand and Quick Selection to expedite the selection process.</p> <p>6. Learners will learn how to save selections for future use, enhancing their workflow efficiency and project organization.</p> <p>7. Learners will be equipped with essential selection skills to enhance their ability to edit and manipulate artwork effectively in Adobe Illustrator.</p> <p>8. Learners will be prepared to apply selection techniques in practical projects and more advanced illustration tasks covered in subsequent units.</p> | <ul style="list-style-type: none">·The Selection tools·The Direct Selection too·The Lasso tools·Automatic selections·Saving selections | 1 | 2 | 2 | 2 |
| 5 | Shape and Line Drawing | <p>1. Learners will demonstrate proficiency in using Adobe Illustrator's shape and line drawing tools to create basic</p> | <ul style="list-style-type: none">·Drawing basic shapes | 1 | 2 | 3 | 3 |

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| | Tools | <p>geometric shapes and objects.</p> <p>2. Learners will understand the various methods for drawing basic shapes, including rectangles, ellipses, and polygons, and will be able to apply these techniques in their artwork.</p> <p>3. Learners will be able to create polygons and stars using Illustrator's dedicated tools, and will understand how to adjust their properties such as number of sides and indentation.</p> <p>4. Learners will master the Line tools in Illustrator, enabling them to create straight lines, curves, and other custom shapes with precision.</p> <p>5. Learners will explore and utilize the Grid tools to create grid-based designs and layouts, understanding how to adjust grid settings to suit different design requirements.</p> <p>6. Learners will develop foundational skills in shape and line drawing, laying the groundwork for more complex illustration techniques covered in subsequent units.</p> <p>7. Learners will be equipped to create basic shapes, patterns, and line art for use in various illustration projects and design tasks.</p> | <p>·Drawing polygons and stars</p> <p>·Drawing with the Line tools</p> <p>·Drawing with the Grid tools</p> | | | | |
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| 6 | Colour | <p>1. Learners will understand different color models used in Adobe Illustrator, including RGB, CMYK, and HSB, and will be able to choose appropriate color models for different types of projects.</p> <p>2. Learners will effectively navigate and utilize the Swatches panel in Illustrator for managing and applying colors to artwork.</p> <p>3. Learners will grasp the concept of global swatches and their significance in maintaining consistency across artwork.</p> <p>4. Learners will demonstrate proficiency in using spot colors for precise color matching and printing requirements.</p> <p>5. Learners will learn to create and use tints to achieve various shades and gradients of colors in their illustrations.</p> <p>6. Learners will organize colors efficiently using color groups, enabling better management and selection of colors within their projects.</p> <p>7. Learners will explore the functionality of the Color Guide panel to generate color harmonies and experiment with different color schemes.</p> <p>8. Learners will develop a strong understanding of color theory and its application in digital illustration, enhancing the visual appeal and effectiveness of their artwork.</p> <p>9. Learners will be equipped to use color effectively to communicate messages, evoke emotions, and enhance the visual impact of their illustrations.</p> <p>10. Learners will be prepared to apply color theory principles and techniques to practical projects in subsequent units, elevating the quality and professionalism of their artwork.</p> | <ul style="list-style-type: none"> ·Colour models in Illustrator ·The Swatches panel ·Global swatches ·Spot colours ·Using tints ·Colour groups ·The Colour Guide panel | 1 | 2 | 3 | 3 |
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| 7 | Strokes | <p>1. Learners will understand stroke attributes in Adobe Illustrator, including stroke weight, color, and alignment, and will be able to manipulate these attributes to achieve desired visual effects.</p> <p>2. Learners will demonstrate proficiency in creating dashed and dotted lines using Illustrator's stroke settings, understanding how to adjust parameters such as dash length and gap spacing.</p> <p>3. Learners will master the creation and customization of arrowheads, enabling them to add directional elements to lines and shapes within their artwork.</p> <p>4. Learners will explore and utilize variable-width strokes to create dynamic and expressive lines with varying thickness along their paths.</p> <p>5. Learners will experiment with different stroke styles and combinations to enhance the visual appeal and convey specific meanings or moods within their illustrations.</p> <p>6. Learners will develop a strong understanding of how stroke attributes contribute to the overall composition and impact of their artwork.</p> <p>7. Learners will be equipped to use strokes effectively to define shapes, add emphasis, and create visual interest in their illustrations.</p> <p>8. Learners will be prepared to apply stroke techniques creatively to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques.</p> | <ul style="list-style-type: none"> ·Stroke attributes ·Creating dashed and dotted lines ·Creating arrowheads ·Variable-width strokes | 1 | 2 | 2 | 2 |
| 8 | Arranging and Ordering | <p>1. Learners will demonstrate proficiency in aligning objects within Adobe Illustrator, including aligning to selection, artboard, and key object, to achieve precise positioning and layout.</p> | <ul style="list-style-type: none"> ·Aligning objects ·Distributing objects | 2 | 4 | 2 | 2 |

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| | | <p>2. Learners will effectively distribute objects evenly along a specified axis or distribute space between multiple objects, enhancing the visual balance and organization of their artwork.</p> <p>3. Learners will understand how to align anchor points of paths and shapes to achieve symmetrical and precise designs within their illustrations.</p> <p>4. Learners will master changing the stacking order of objects, including arranging objects to the front, back, forward, and backward, to control layering and overlapping within their artwork.</p> <p>5. Learners will explore and utilize different drawing modes such as Draw Normal, Draw Inside, and Draw Behind to create artwork with varied composition and layering effects.</p> <p>6. Learners will grasp the concept of layers in Adobe Illustrator and understand their significance in organizing and managing complex artwork.</p> <p>7. Learners will effectively target objects using layers, enabling them to select and manipulate specific elements within their artwork more efficiently.</p> <p>8. Learners will develop a strong understanding of how arranging and ordering techniques contribute to the visual hierarchy and composition of their illustrations.</p> <p>9. Learners will be equipped to use arranging and ordering techniques creatively to enhance the clarity, organization, and visual impact of their artwork.</p> <p>10. Learners will be prepared to apply arranging and ordering techniques to practical projects in subsequent units, optimizing their workflow and productivity in Adobe Illustrator.</p> | <ul style="list-style-type: none"> ·Aligning points ·Changing the stacking order ·Using the drawing modes ·Using layers ·Targeting objects using layers | | | | |
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| 9 | Groups | <p>1. Learners will demonstrate proficiency in working with groups in Adobe Illustrator, understanding how to create, edit, and manage groups of objects within their artwork.</p> <p>2. Learners will effectively utilize the Group Selection tool to select and manipulate individual objects within a group without ungrouping them.</p> <p>3. Learners will master the use of Isolation Mode to isolate and focus on specific groups or objects within a complex illustration, enhancing workflow efficiency and precision.</p> <p>4. Learners will understand the advantages of using groups to organize and manage artwork, including improved editing capabilities and enhanced readability.</p> <p>5. Learners will explore advanced techniques for working with groups, such as duplicating groups, moving objects between groups, and applying transformations to grouped objects.</p> <p>6. Learners will develop a strong understanding of how to use groups strategically to streamline their workflow and optimize productivity in Adobe Illustrator.</p> <p>7. Learners will be equipped to use group-related tools and features creatively to organize and manage their artwork effectively, improving clarity and coherence.</p> <p>8. Learners will be prepared to apply group-related techniques to practical projects in subsequent units, enhancing their proficiency and versatility in Adobe Illustrator.</p> | <ul style="list-style-type: none"> ·Working with groups ·The Group Selection tool ·Using Isolation Mode | 2 | 4 | 2 | 2 |
| 10 | Transforms | <p>1. Learners will demonstrate proficiency in using specific transform tools including Move, Scale, Rotate, and Reflect in Adobe Illustrator,</p> | <ul style="list-style-type: none"> ·Using the specific Transform tools (Move, | 1 | 2 | 2 | 2 |

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| | | <p>understanding how to apply precise transformations to objects within their artwork.</p> <p>2. Learners will effectively utilize the Free Transform tool ('E') to perform non-uniform transformations such as skewing and distorting objects, enabling creative manipulation and adjustment of shapes.</p> <p>3. Learners will master the use of the Transform Again command ('CTRL+D') to repeat the last transformation applied, facilitating rapid duplication and arrangement of objects within their illustrations.</p> <p>4. Learners will understand the functionality of the Transform Each command, allowing for simultaneous transformation of multiple selected objects based on specified parameters such as scale, rotation, and position.</p> <p>5. Learners will explore and apply transforms as an effect, understanding how to apply transformations dynamically to create stylized effects and visual enhancements within their artwork.</p> <p>6. Learners will develop a strong understanding of how to use transform tools and commands strategically to achieve desired compositions and effects within Adobe Illustrator.</p> <p>7. Learners will be equipped to use transform techniques creatively to manipulate and arrange objects within their artwork effectively, enhancing visual impact and storytelling.</p> <p>8. Learners will be prepared to apply transform techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | <p>Scale, Rotate, Reflect)</p> <p>·Using the Free Transform tool ('E')</p> <p>·Using Transform Again ('CTRL+D')</p> <p>·The Transform Each command</p> <p>·Transforms as an effect</p> | | | | |
| 11 | Drawing by | <p>1. Learners will demonstrate proficiency in creating compound paths and shapes</p> | <p>·Compound paths and</p> | 1 | 2 | 3 | 3 |

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| | Construction | <p>in Adobe Illustrator using the Ctrl+8 shortcut, understanding how to combine multiple shapes into a single compound object for advanced editing and manipulation.</p> <p>2. Learners will effectively navigate and utilize the Pathfinder panels to perform Boolean operations such as unite, intersect, subtract, and exclude, enabling precise shape manipulation and creation.</p> <p>3. Learners will master the use of the Shape Builder tool (Shift+M) to intuitively merge, divide, and manipulate shapes, facilitating efficient construction and refinement of complex illustrations.</p> <p>4. Learners will understand the concept of Live Paint ('Ctrl+Alt+X' or 'K' Paint) and its significance in creating editable regions for coloring and painting within artwork, enabling flexible and dynamic coloring workflows.</p> <p>5. Learners will explore and utilize clipping masks ('Ctrl+7') to control visibility and define boundaries of objects within their artwork, allowing for non-destructive editing and creative composition.</p> <p>6. Learners will develop a strong understanding of drawing by construction techniques in Adobe Illustrator, enabling them to create complex illustrations with precision and efficiency.</p> <p>7. Learners will be equipped to use drawing by construction tools and techniques creatively to construct, refine, and manipulate shapes and objects within their artwork effectively.</p> <p>8. Learners will be prepared to apply drawing by construction techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe</p> | <p>shapes ('Ctrl+8')</p> <ul style="list-style-type: none"> ·The Pathfinder panels ·The Shape Builder ('Shift+M') ·Live Paint ('Ctrl+Alt+X') ('K' Paint) ·Clipping masks ('Ctrl+7') | | | | |
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| | | Illustrator. | | | | | |
| 12 | Drawing Tools | <p>1. Learners will demonstrate proficiency in using the Pen tools in Adobe Illustrator to create and edit Bezier curves, understanding how to manipulate anchor points and control handles to achieve precise shapes and paths.</p> <p>2. Learners will effectively utilize the Curvature Pen tool to draw smooth and fluid curves with intuitive controls, enabling faster and more natural creation of paths.</p> <p>3. Learners will master the use of the Pencil tools to draw freeform shapes and paths, understanding how to adjust settings for greater control and accuracy.</p> <p>4. Learners will explore and experiment with the Eraser tool to remove parts of paths and shapes, understanding its various settings and how to use it effectively for editing artwork.</p> <p>5. Learners will learn techniques for improving paths, including refining anchor points, adjusting handles, and smoothing curves, to achieve cleaner and more precise paths within their illustrations.</p> <p>6. Learners will develop a strong understanding of drawing tools in Adobe Illustrator and their respective strengths and applications for different illustration tasks.</p> <p>7. Learners will be equipped to use drawing tools creatively to sketch, outline, and refine shapes and paths within their artwork effectively.</p> <p>8. Learners will be prepared to apply drawing tool techniques to practical projects in subsequent units, expanding their proficiency and versatility in Adobe</p> | <p>·The Pen tools</p> <p>·The Curvature Pen tool</p> <p>·The Pencil tools</p> <p>·Drawing with the Eraser tool</p> <p>·Improving paths</p> | 1 | 2 | 2 | 2 |

| | | Illustrator. | | | | | |
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| 13 | Using Guides and Grids | <p>1. Learners will demonstrate proficiency in using grids and guides in Adobe Illustrator to assist in precise alignment and layout of artwork.</p> <p>2. Learners will effectively utilize grids to create structured layouts and maintain consistent spacing and proportions within their illustrations.</p> <p>3. Learners will understand the importance of guides in defining specific areas and alignment points within their artwork, enabling precise positioning and arrangement of objects.</p> <p>4. Learners will master the technique of making guides from objects, understanding how to convert selected objects into guides to use them as reference points for alignment and arrangement.</p> <p>5. Learners will explore advanced techniques for utilizing grids and guides, including creating custom grids and using multiple sets of guides for complex layouts.</p> <p>6. Learners will develop a strong understanding of how grids and guides contribute to the precision and organization of artwork within Adobe Illustrator.</p> <p>7. Learners will be equipped to use grids and guides creatively to assist in the composition, alignment, and arrangement of objects within their artwork effectively.</p> <p>8. Learners will be prepared to apply grid and guide techniques to practical projects in subsequent units, optimizing their workflow and productivity in Adobe Illustrator.</p> | <p>·Using grids and guides</p> <p>·Making guides from objects</p> | 1 | 2 | 2 | 2 |

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| 14 | Gradients | <p>1. Learners will demonstrate proficiency in creating and applying linear gradients in Adobe Illustrator, understanding how to adjust angle, direction, and color stops to achieve desired effects.</p> <p>2. Learners will effectively utilize radial gradients to create smooth transitions from one color to another, understanding how to adjust radius, center point, and color stops for varied effects.</p> <p>3. Learners will master the use of freeform gradients to create complex and organic color blends, understanding how to add and manipulate color points to control the gradient's shape and distribution.</p> <p>4. Learners will explore and experiment with applying gradients to strokes, understanding how to create gradient strokes with varying thickness and opacity for creative effects.</p> <p>5. Learners will understand the principles of color theory and how to apply them effectively when creating gradients, ensuring harmonious and visually appealing results.</p> <p>6. Learners will develop a strong understanding of the different types of gradients available in Adobe Illustrator and their respective applications for creating depth, dimension, and visual interest in artwork.</p> <p>7. Learners will be equipped to use gradients creatively to enhance the visual impact and realism of their artwork, adding depth, texture, and dimension to objects and illustrations.</p> <p>8. Learners will be prepared to apply gradient techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | <ul style="list-style-type: none"> ·Linear gradients ·Radial gradients ·Freeform gradients ·Gradients on strokes | 1 | 2 | 2 | 2 |
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| 15 | Patterns | <p>1. Learners will demonstrate proficiency in creating patterns in Adobe Illustrator, understanding how to define and repeat a design to create seamless and tiled patterns.</p> <p>2. Learners will effectively utilize pattern strokes to apply patterns along paths, understanding how to adjust settings such as scale and spacing for varied effects.</p> <p>3. Learners will master the technique of transforming patterns, including scaling, rotating, and mirroring, to customize and modify patterns to suit specific design requirements.</p> <p>4. Learners will explore and experiment with different pattern creation methods, such as using existing artwork, creating patterns from scratch, and importing patterns from external sources.</p> <p>5. Learners will understand the principles of pattern design, including symmetry, repetition, and balance, and how to apply them effectively when creating patterns.</p> <p>6. Learners will develop a strong understanding of the various applications of patterns in design, including textiles, wallpapers, illustrations, and graphic design.</p> <p>7. Learners will be equipped to use patterns creatively to enhance the visual appeal and texture of their artwork, adding depth, interest, and personality to designs.</p> <p>8. Learners will be prepared to apply pattern techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | <ul style="list-style-type: none"> ·Creating a pattern ·Pattern strokes ·Transforming patterns | 1 | 2 | 2 | 2 |
| 16 | Symbols | <p>1. Learners will demonstrate proficiency in creating and utilizing static symbols in Adobe Illustrator, understanding how</p> | <ul style="list-style-type: none"> ·Static symbols ·Dynamic | 2 | 4 | 2 | 2 |

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| | | <p>to convert artwork into reusable symbols for efficient editing and replication.</p> <p>2. Learners will effectively utilize dynamic symbols to create interactive and responsive elements within their artwork, understanding how to define variables and behaviors for dynamic symbol instances.</p> <p>3. Learners will master the technique of managing symbols, including creating, editing, organizing, and deleting symbols within the Symbols panel.</p> <p>4. Learners will explore and experiment with different applications of symbols in design, including creating symbol libraries, applying symbols for repeated elements in illustrations, and using symbols for interactive elements in UI/UX design.</p> <p>5. Learners will understand the benefits of using symbols in design, including improved workflow efficiency, consistency, and flexibility in editing and updating artwork.</p> <p>6. Learners will develop a strong understanding of how to use symbols creatively to enhance the efficiency and versatility of their artwork, streamlining the design process and promoting consistency across projects.</p> <p>7. Learners will be equipped to leverage symbols effectively in various design contexts, including graphic design, illustration, web design, and user interface design.</p> <p>8. Learners will be prepared to apply symbol techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | symbols | | | | |
| 17 | Blends, Blending, and | <p>1. Learners will demonstrate proficiency in using blends in Adobe Illustrator to create smooth transitions and</p> | <p>·Using blends</p> <p>·Using blending</p> | 1 | 2 | 2 | 2 |

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| | Transparency | <p>intermediate steps between two or more objects or shapes.</p> <p>2. Learners will effectively utilize blending modes to apply various blending effects such as transparency, color burn, and overlay to achieve desired visual effects and moods within their artwork.</p> <p>3. Learners will master the technique of using opacity masks to control the transparency of objects or groups, understanding how to create complex and nuanced opacity effects within their illustrations.</p> <p>4. Learners will explore and experiment with different blending techniques and effects, including creating gradient blends, pattern blends, and opacity blends to add depth, dimension, and visual interest to artwork.</p> <p>5. Learners will understand the principles of transparency and blending in design, including how to use these techniques to create visual hierarchy, depth, and emphasis within compositions.</p> <p>6. Learners will develop a strong understanding of how to use blends, blending modes, and transparency creatively to enhance the visual impact and storytelling of their artwork.</p> <p>7. Learners will be equipped to leverage blends, blending modes, and transparency effectively in various design contexts, including illustration, graphic design, and digital art.</p> <p>8. Learners will be prepared to apply blending and transparency techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | modes | | | | |
| | | | ·Using opacity masks | | | | |

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| 18 | Appearances | <p>1. Learners will understand the significance and versatility of appearances in Adobe Illustrator, recognizing how they allow for non-destructive editing and styling of objects.</p> <p>2. Learners will demonstrate proficiency in utilizing the Appearance panel to apply and manage multiple appearances, including strokes, fills, effects, and graphic styles, to objects within their artwork.</p> <p>3. Learners will explore the integration between Illustrator and Photoshop effects, understanding how to apply and customize various effects to achieve desired visual effects and styles.</p> <p>4. Learners will master the technique of editing or removing effects applied to objects, understanding how to adjust effect parameters or remove effects entirely while preserving object integrity.</p> <p>5. Learners will effectively utilize graphic styles to apply predefined sets of appearances to objects, streamlining the styling process and promoting consistency across artwork.</p> <p>6. Learners will explore and experiment with different brush tools in Illustrator, including the Paintbrush Tool and Blob Brush Tool, understanding how to create and customize artistic strokes and effects.</p> <p>7. Learners will understand the functionality of the Eyedropper tools, including the ability to sample and apply appearance attributes such as colors, strokes, and effects from one object to another.</p> <p>8. Learners will develop a strong understanding of how to use appearances, effects, graphic styles, and brushes creatively to enhance the visual impact and storytelling of their</p> | <ul style="list-style-type: none"> ·The power of appearances ·The Appearance panels ·Illustrator and Photoshop effects ·Editing or removing effects ·Graphic styles ·The Brush tools ·The Eyedropper tools | 1 | 2 | 2 | 2 |
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| | | <p>artwork.</p> <p>9. Learners will be equipped to leverage appearances and effects effectively in various design contexts, including illustration, graphic design, and digital art.</p> <p>10. Learners will be prepared to apply appearance and effect techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | | | | | |
| 19 | Type | <p>1. Learners will demonstrate proficiency in using point type in Adobe Illustrator to create single lines or individual words of text, understanding how to click on the artboard to create a text object.</p> <p>2. Learners will effectively utilize character options to modify text attributes such as font, size, weight, style, kerning, and tracking, enhancing the visual appearance and readability of text within their artwork.</p> <p>3. Learners will master paragraph options to control text alignment, justification, indentation, spacing, and hyphenation within text blocks, ensuring proper formatting and layout of paragraphs.</p> <p>4. Learners will understand the functionality of the Touch Type tool, allowing for intuitive and precise editing of individual characters within text objects, including scaling, rotating, and skewing.</p> <p>5. Learners will effectively use the Type on a Path tool to create text that follows the shape of a curved or straight path, understanding how to adjust the position and orientation of text along the path.</p> <p>6. Learners will explore and experiment with outlining type, converting text into vector shapes to enable further</p> | <p>·Using point type</p> <p>·Character options</p> <p>·Paragraph options</p> <p>·The Touch Type tool</p> <p>·Using Type on A Path tool</p> <p>·Outlining type</p> | 1 | 2 | 2 | 2 |

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| | | <p>manipulation and editing, such as applying fills, strokes, and effects.</p> <p>7. Learners will develop a strong understanding of typography principles and techniques, including proper type selection, formatting, and placement, to effectively convey messages and enhance visual communication in their artwork.</p> <p>8. Learners will be equipped to use type creatively to add context, meaning, and visual interest to their artwork, leveraging typographic elements to complement and enhance overall design compositions.</p> <p>9. Learners will be prepared to apply type techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | | | | | |
| 20 | Images in Illustrator | <p>1. Learners will demonstrate proficiency in placing images into Adobe Illustrator documents, understanding how to import raster images from external sources such as JPEG, PNG, or TIFF files.</p> <p>2. Learners will effectively utilize the embedding function to include images within Illustrator documents, ensuring that the image data is stored within the document itself rather than linked externally.</p> <p>3. Learners will master the technique of cropping images within Illustrator, including using clipping masks or the crop tool to remove unwanted parts of an image while retaining its original resolution and quality.</p> <p>4. Learners will explore and experiment with different methods of image manipulation and adjustment within Illustrator, such as resizing, rotating, and applying filters or effects to images.</p> <p>5. Learners will understand the benefits</p> | <ul style="list-style-type: none"> ·Placing images ·Embedding images ·Cropping images | 1 | 2 | 2 | 2 |

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| | | <p>and considerations of using raster images within vector-based artwork, including scalability, resolution, and file size management.</p> <p>6. Learners will develop a strong understanding of how to incorporate images effectively into Illustrator artwork, leveraging them to enhance visual storytelling and communication.</p> <p>7. Learners will be equipped to use images creatively within their artwork, understanding how to integrate them seamlessly with vector elements to create cohesive and engaging compositions.</p> <p>8. Learners will be prepared to apply image manipulation techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | | | | | |
| 21 | Pixels to Vectors | <p>1. Learners will demonstrate proficiency in converting raster images into vector graphics using the Image Trace feature in Adobe Illustrator, understanding how to adjust settings to achieve desired levels of detail and accuracy.</p> <p>2. Learners will effectively utilize Image Trace to convert complex raster images, such as photographs or scanned artwork, into scalable vector graphics (SVG) for use in print or digital media.</p> <p>3. Learners will master the technique of using Photoshop in conjunction with Image Trace, understanding how to prepare raster images in Photoshop before importing them into Illustrator for tracing.</p> <p>4. Learners will explore and experiment with different Image Trace presets and options, including color modes, threshold settings, and advanced options, to achieve optimal results for different types of images.</p> | <p>·Using Image Trace</p> <p>·Using Photoshop with Image Trace</p> | 2 | 4 | 2 | 2 |

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| | | <p>5. Learners will understand the benefits and limitations of using Image Trace for converting raster images to vectors, including considerations such as file size, complexity of detail, and output resolution.</p> <p>6. Learners will develop a strong understanding of how to optimize the conversion process from pixels to vectors, ensuring that the resulting vector graphics maintain visual fidelity and clarity while minimizing file size and complexity.</p> <p>7. Learners will be equipped to use Image Trace creatively to convert raster artwork into scalable vector graphics, enabling greater flexibility and versatility in design and illustration projects.</p> <p>8. Learners will be prepared to apply pixel-to-vector conversion techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | | | | | |
| 22 | Modifying Artwork | <p>1. Learners will demonstrate proficiency in recoloring artwork in Adobe Illustrator, understanding how to adjust the color of fills, strokes, and gradients using various tools and methods.</p> <p>2. Learners will effectively utilize the Recolor Artwork feature to apply global color adjustments to artwork, including changing hue, saturation, brightness, and recoloring artwork based on predefined color themes.</p> <p>3. Learners will master the technique of using the Puppet Warp tool to distort and manipulate selected objects or paths within artwork, understanding how to create and adjust control points to achieve desired transformations.</p> <p>4. Learners will explore and experiment with different recoloring techniques,</p> | <ul style="list-style-type: none"> ·Recolour artwork ·The Puppet Warp tool | 1 | 2 | 2 | 2 |

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| | | <p>including using color groups, creating color swatch libraries, and applying custom color adjustments to specific elements within artwork.</p> <p>5. Learners will understand the principles of color theory and how to apply them effectively when modifying artwork, ensuring harmonious and visually appealing color schemes and compositions.</p> <p>6. Learners will develop a strong understanding of how to use recoloring and distortion techniques creatively to enhance the visual impact and storytelling of their artwork.</p> <p>7. Learners will be equipped to leverage recoloring and distortion tools effectively in various design contexts, including illustration, graphic design, and digital art.</p> <p>8. Learners will be prepared to apply modification techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | | | | | |
| 23 | Artboards | <p>1. Learners will demonstrate proficiency in working with artboards in Adobe Illustrator, understanding how to create, manage, and navigate between multiple artboards within a single document.</p> <p>2. Learners will effectively utilize artboards to organize and structure their artwork, including creating separate artboards for different design variations, layouts, or iterations.</p> <p>3. Learners will master the technique of arranging artboards within the document, including aligning, distributing, and rearranging artboards to optimize workspace efficiency and organization.</p> <p>4. Learners will explore and experiment with different artboard settings and</p> | <ul style="list-style-type: none"> Working with artboards Arranging artboards | 1 | 2 | 2 | 2 |

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| | | <p>options, including adjusting artboard size, orientation, and spacing, to accommodate various design requirements and output formats.</p> <p>5. Learners will understand the benefits of using artboards for managing multi-page or multi-artwork projects, including improved organization, navigation, and presentation of artwork.</p> <p>6. Learners will develop a strong understanding of how to use artboards creatively to plan, develop, and present their artwork effectively, facilitating collaboration and iteration throughout the design process.</p> <p>7. Learners will be equipped to leverage artboards effectively in various design contexts, including illustration, graphic design, web design, and print layout.</p> <p>8. Learners will be prepared to apply artboard techniques to practical projects in subsequent units, expanding their repertoire of illustration styles and techniques in Adobe Illustrator.</p> | | | | | |
| 24 | Output | <p>1. Learners will demonstrate proficiency in packaging Adobe Illustrator files, understanding how to gather and collect all linked assets and fonts used in the document to ensure portability and compatibility when sharing or transferring files.</p> <p>2. Learners will effectively utilize the export function in Adobe Illustrator to save artwork as other file types such as JPEG, PNG, PDF, or SVG, understanding how to adjust settings such as resolution, compression, and color mode for different output requirements.</p> <p>3. Learners will master the technique of asset export, including exporting individual elements or layers from Illustrator documents for use in other software applications or platforms.</p> <p>4. Learners will explore and experiment</p> | <ul style="list-style-type: none"> ·Packaging Illustrator files ·Export as other file types ·Asset Export | 3 | 6 | 2 | 2 |

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| | | <p>with different export options and formats, understanding how to optimize file size and quality while preserving visual fidelity and compatibility across different devices and platforms.</p> <p>5. Learners will understand the importance of proper file management and organization when outputting artwork from Adobe Illustrator, including naming conventions, folder structures, and version control.</p> <p>6. Learners will develop a strong understanding of how to prepare and output artwork effectively for various purposes and platforms, including print, web, and digital media.</p> <p>7. Learners will be equipped to leverage output techniques creatively to ensure that their artwork is presented and distributed in the most appropriate and effective manner for its intended audience and context.</p> <p>8. Learners will be prepared to apply output techniques to practical projects in subsequent units, ensuring that their artwork is properly prepared and optimized for sharing, printing, or publication.</p> | | | | | |
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NOS/Module Name: Acquire proficiency in Computer Graphics

NOS/Module Code: MSME/GWD/02

NOS/Module Outcome:

- Understand the fundamentals of computer graphics.
- Install and navigate software for computer graphics.
- Create and manage documents, panels, and workspaces.
- Differentiate between file types, resolution, and colour modes.
- Make selections and perform basic compositing techniques.
- Use layers and masks effectively for editing.
- Apply cropping, transformations, and perspective warping.
- Adjust images using histograms and adjustment layers.
- Perform localized retouching and photo enhancements.
- Utilize typography, guides, and grids for design layouts.
- Manage libraries, save files, and export projects efficiently.

Theory Hours: 30 Practical Hours: 60

Theory Marks: NA

Practical Marks: 100

| Unit | Unit Name | Unit Outcome | Content (Chapter/Topics) | TR | TR | PR | PR |
|------|-----------|--------------|--------------------------|----|----|----|----|
|------|-----------|--------------|--------------------------|----|----|----|----|

| No | | | | Hours | Marks | Hours | Marks |
|----|-----------------------------------|--|--|-------|-------|-------|-------|
| 1 | Introduction to Computer Graphics | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the basics of computer graphics, including fundamental concepts such as pixels, resolution, color models, and raster vs. vector graphics. 2. Learners will demonstrate proficiency in installing Adobe Photoshop software on their computer systems, understanding the steps involved in downloading, installing, and activating the software. 3. Learners will be able to navigate the Photoshop interface, including the menu bar, tool panels, workspace layout, and options bar, to familiarize themselves with the software's features and functionality. 4. Learners will explore and experiment with basic Photoshop tools and commands, including selection tools, painting tools, text tools, and layer management, to begin creating and editing digital images and graphics. 5. Learners will develop a strong understanding of the role of Adobe Photoshop in computer graphics, including its applications in photo editing, digital art, graphic design, and multimedia production. 6. Learners will be equipped to apply basic Photoshop techniques and principles to practical projects in subsequent units, building a foundation for more advanced topics in computer graphics. | <ul style="list-style-type: none"> ● Basics of Computer Graphics ● Software's Installation | 3 | - | 6 | 10 |
| 2 | Quick-Start Exercise | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate proficiency in navigating the Adobe Illustrator start workspace, understanding its layout and functionality for accessing recent files, creating new documents, and accessing tutorials and templates. 2. Learners will effectively create new documents in Adobe Illustrator, understanding how to specify document settings such as artboard size, orientation, and units, to suit different design requirements. 3. Learners will identify and understand the differences in interface elements and keyboard shortcuts between Mac and Windows versions of Adobe Illustrator, enabling them to navigate and operate the software effectively on their respective operating systems. 4. Learners will master the use of artboards in Adobe Illustrator, including creating, resizing, duplicating, and arranging artboards within a single document to accommodate various design iterations and layouts. 5. Learners will proficiently work with panels in Adobe Illustrator, including opening, closing, docking, and rearranging panels to customize their workspace and optimize workflow efficiency. 6. Learners will explore and customize panels and the toolbar in Adobe Illustrator, including adding, removing, and rearranging tools and panels to create a personalized workspace tailored to their specific workflow and preferences. | <ul style="list-style-type: none"> ● The Start Workspace ● Creating New Documents ● Mac and Windows Differences ● Art boards ● Working with Panels ● Customize Panels ● Customize the Toolbar ● Keyboard Shortcuts and Menu Commands ● Using Workspaces ● Interface Shading Options ● Screen Modes ● Working with Multiple Documents ● Tab Preferences ● Document Navigation ● Preferences Dialog Box | 3 | - | 6 | 10 |

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| | | <p>7. Learners will develop a strong understanding of keyboard shortcuts and menu commands in Adobe Illustrator, understanding how to access and execute common tasks and commands efficiently to streamline their workflow.</p> <p>8. Learners will effectively use workspaces in Adobe Illustrator, understanding how to save, load, and switch between custom workspace configurations to adapt to different tasks or project requirements.</p> <p>9. Learners will explore interface shading options and screen modes in Adobe Illustrator, including adjusting the interface brightness and switching between different screen modes for optimal visibility and focus during the design process.</p> <p>10. Learners will demonstrate proficiency in working with multiple documents in Adobe Illustrator, understanding how to open, navigate, arrange, and switch between multiple documents within the application.</p> <p>11. Learners will explore and customize tab preferences in Adobe Illustrator, including adjusting tab behavior and appearance to suit their workflow preferences and screen space availability.</p> <p>12. Learners will effectively navigate and control document navigation in Adobe Illustrator, including zooming, panning, scrolling, and navigating between artboards and pages within a document.</p> <p>13. Learners will understand and customize preferences in Adobe Illustrator, including accessing and adjusting application settings to tailor the software to their specific workflow and preferences.</p> | | | | | |
| 3 | Digital Imaging Concepts | <p>Unit Level Outcomes:</p> <p>1. Learners will demonstrate proficiency in understanding different file types used in digital imaging, including raster (JPEG, PNG, TIFF) and vector (SVG, EPS, AI) formats, and their respective characteristics and applications.</p> <p>2. Learners will effectively review RAW formats commonly used in digital photography, understanding their benefits, limitations, and workflow considerations for processing and editing RAW images.</p> <p>3. Learners will differentiate between bitmaps and vectors in digital imaging, understanding the characteristics, uses, and advantages of each type of graphic format for different design and illustration purposes.</p> <p>4. Learners will master the concept of resolution in digital imaging, including understanding pixel dimensions, DPI (dots per inch), PPI (pixels per inch), and their significance in determining image quality, size, and output capabilities.</p> <p>5. Learners will understand the difference between resizing and resampling images, including when and how to adjust image dimensions without changing the pixel count (resize) and when to adjust both dimensions and pixel count (resample) to maintain image quality.</p> <p>6. Learners will proficiently calculate and determine print size based on image resolution and dimensions, understanding how to convert pixel dimensions to physical dimensions for printing purposes.</p> <p>7. Learners will explore different color modes used in digital imaging, including RGB (Red, Green, Blue) for digital displays, CMYK (Cyan,</p> | <ul style="list-style-type: none"> ● Understanding File Types ● Reviewing RAW Formats ● Bitmaps vs. Vectors ● Understanding Resolution ● Resize vs. Resample Images ● Print Size ● Colour Modes | 3 | - | 6 | 10 |

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| | | Magenta, Yellow, Black) for print, and grayscale, understanding their characteristics, uses, and conversion methods between modes. | | | | | |
| 4 | Making Selections and Basic Compositing | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate proficiency in using selection tools in Adobe Photoshop, understanding the purpose and functionality of tools such as the Marquee, Lasso, and Quick Selection tools for making precise selections in digital images. 2. Learners will effectively utilize practical marquee selection techniques to select rectangular or elliptical areas within an image, understanding how to adjust selection parameters such as size, shape, and position. 3. Learners will master the technique of feathering a selection to create soft, gradual transitions between selected and unselected areas, enhancing blending and compositing effects within the image. 4. Learners will proficiently copy and paste selected areas of an image, understanding how to duplicate or move selected content within the same image or to another document. 5. Learners will understand the concept of scaling an image, including resizing selected content proportionally or non-proportionally using transformation tools such as the Free Transform or Scale tool. 6. Learners will explore and experiment with modifying selections using various techniques such as adding, subtracting, intersecting, or refining selection edges to achieve desired results. 7. Learners will demonstrate proficiency in using advanced selection tools and commands such as the Quick Selection, Magic Wand, and Select Subject tools to automatically select objects or areas within an image based on color, tone, or content. 8. Learners will effectively utilize the Select and Mask workspace in Adobe Photoshop to refine and adjust selections, including modifying edge properties, smoothing, feathering, and contracting or expanding selection borders. 9. Learners will master the use of Quick Mask mode to visualize and edit selections using painting and editing tools directly on the image canvas, enabling precise selection refinement and adjustment. 10. Learners will explore the Color Range command to create selections based on specific color ranges within an image, understanding how to adjust settings to target and select specific colors or tonal values. 11. Learners will proficiently save selections as alpha channels or masks within Adobe Photoshop documents, understanding how to reuse and edit selections later in the editing process. | <ul style="list-style-type: none"> ● Selection Tool Overview ● Practical Marquee Selection ● Feather a Selection ● Copy and Paste ● Scaling the Image ● Modifying Selections ● Quick Selection and Magic Wand ● Select Subject ● Select and Mask Workspace ● Quick Mask Mode ● Colour Range Command ● Saving Selections | 3 | - | 6 | 10 |
| 5 | Layers and Masks | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate proficiency in using the undo and redo functions in Adobe Photoshop, understanding how to revert to previous editing states or restore changes made during the editing process. 2. Learners will effectively manage the background layer in Adobe Photoshop, understanding its role as the bottommost layer in the layer stack and its special properties compared to other layers. 3. Learners will master the technique of opening | <ul style="list-style-type: none"> ● Undo and Redo ● Background Layer ● Opening Images to Layers ● Layer Basics ● Selecting Layers ● Layer Panel Options ● Locking Layers | 3 | - | 6 | 10 |

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| | | <p>images as layers in Adobe Photoshop, including importing external images or documents and placing them onto separate layers within the active document.</p> <p>4. Learners will understand the basics of working with layers in Adobe Photoshop, including creating, deleting, renaming, reordering, and merging layers to organize and manage artwork elements.</p> <p>5. Learners will proficiently select layers in Adobe Photoshop, understanding how to use the Layers panel, the Move tool, or keyboard shortcuts to select individual layers or multiple layers simultaneously.</p> <p>6. Learners will explore and customize layer panel options in Adobe Photoshop, including adjusting panel display settings, viewing layer thumbnails, and organizing layers using layer filtering and grouping options.</p> <p>7. Learners will effectively lock layers in Adobe Photoshop to prevent accidental edits or modifications to layer content, understanding how to lock layer transparency, position, or entire layers as needed.</p> <p>8. Learners will demonstrate proficiency in distributing and aligning layers in Adobe Photoshop, including using alignment and distribution tools to arrange layers relative to each other or within the canvas.</p> <p>9. Learners will understand the concept of layer groups in Adobe Photoshop, including creating, organizing, and managing groups of layers to streamline workflow and improve organization.</p> <p>10. Learners will explore layer opacity options in Adobe Photoshop, including adjusting layer opacity and fill opacity to control the visibility and transparency of layer content.</p> <p>11. Learners will understand the principles of blend modes in Adobe Photoshop, including how blend modes interact with underlying layers to create various blending effects and composite images.</p> <p>12. Learners will master the basics of layer masks in Adobe Photoshop, including creating, editing, and applying layer masks to selectively reveal or hide portions of layer content.</p> <p>13. Learners will proficiently create gradient layer masks in Adobe Photoshop, understanding how to use gradient fills to create smooth transitions and blending effects between multiple layers.</p> <p>14. Learners will explore and apply layer styles in Adobe Photoshop, including adding effects such as drop shadows, glows, bevels, and overlays to layer content to enhance visual appearance and realism.</p> <p>15. Learners will understand the concept of flattening layers in Adobe Photoshop, including merging visible layers into a single layer or flattening the entire layer stack to simplify artwork and reduce file size.</p> | <ul style="list-style-type: none"> • Distribute and Align Layers • Layer Groups • Layer Opacity Options • Understanding Blend Modes • Layer Mask Basics • Gradient Layer Masks • Layer Styles • Flatten Layers | | | | |
| 6 | Crops, Transformations, and Warps | <p>Unit Level Outcomes:</p> <p>1. Learners will demonstrate proficiency in using the Crop Tool in Adobe Photoshop, understanding how to define and apply cropping boundaries to selectively remove unwanted areas from an image.</p> <p>2. Learners will effectively apply non-destructive cropping techniques in Adobe Photoshop, including using adjustment layers or smart objects to preserve original image data and revert changes if needed.</p> | <ul style="list-style-type: none"> • Using the Crop Tool • Non-destructive Crops • Crop to Add Canvas • Canvas Size Dialog Box • Perspective Crop Tool • Straighten an Image | 3 | - | 6 | 10 |

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| | | <p>3. Learners will master the technique of cropping to add canvas in Adobe Photoshop, including expanding the canvas size while preserving existing image content or using the Crop Tool with the Content-Aware option to fill in missing areas.</p> <p>4. Learners will proficiently use the Canvas Size dialog box in Adobe Photoshop to adjust the dimensions of the canvas area, understanding how to specify pixel dimensions, units, and anchor points for resizing.</p> <p>5. Learners will understand the purpose and functionality of the Perspective Crop Tool in Adobe Photoshop, including correcting perspective distortions and straightening skewed or tilted images.</p> <p>6. Learners will effectively straighten images in Adobe Photoshop, understanding how to use the Straighten Image option or the Ruler tool to align horizontal or vertical elements within the image.</p> <p>7. Learners will master the Transform command in Adobe Photoshop, including scaling, rotating, skewing, and distorting selected image content to modify its size, orientation, and perspective.</p> <p>8. Learners will proficiently use the Content-Aware Scale feature in Adobe Photoshop to resize images while preserving important visual elements and avoiding distortion or stretching.</p> <p>9. Learners will understand the purpose and functionality of the Puppet Warp tool in Adobe Photoshop, including manipulating and distorting selected image areas using control points to create natural deformations or transformations.</p> <p>10. Learners will explore and experiment with the Perspective Warp feature in Adobe Photoshop, understanding how to adjust the perspective of selected image areas to match the desired viewpoint or composition.</p> | <ul style="list-style-type: none"> ● Transform ● Content-aware Scale ● Puppet Warp ● Perspective Warp | | | | |
| 7 | Adjustments | <p>Unit Level Outcomes:</p> <p>1. Learners will demonstrate proficiency in reviewing the histogram in Adobe Photoshop, understanding how to interpret the distribution of tonal values in an image and identify potential exposure or color balance issues.</p> <p>2. Learners will effectively utilize adjustment layers in Adobe Photoshop to apply non-destructive adjustments to image tone, color, and contrast, understanding how to stack multiple adjustment layers for cumulative effects.</p> <p>3. Learners will master the technique of using the Levels adjustment in Adobe Photoshop to adjust the tonal range and distribution of shadows, midtones, and highlights in an image for optimal contrast and exposure.</p> <p>4. Learners will proficiently apply adjustment layer masks in Adobe Photoshop to selectively apply adjustments to specific areas of an image, understanding how to paint on the mask to reveal or hide adjustment effects.</p> <p>5. Learners will understand the concept of clipping adjustment layers to the layer below in Adobe Photoshop, including restricting adjustment effects to only affect the contents of the layer immediately below.</p> <p>6. Learners will explore and apply the Curves adjustment in Adobe Photoshop to fine-tune tonal and color adjustments using control points to create custom contrast and color balance adjustments.</p> | <ul style="list-style-type: none"> ● Reviewing the Histogram ● Adjustment Layers ● Levels Adjustment ● Adjustment Layer Mask ● Clipping to the Adjustment Layer ● Curves Adjustment ● Hue/Saturation Adjustment ● Vibrance Adjustment ● Photo Filter Adjustment ● Remove a Colour Cast ● Black and White Adjustment | 3 | - | 6 | 10 |

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| | | <p>7. Learners will effectively use the Hue/Saturation adjustment in Adobe Photoshop to modify the hue, saturation, and lightness of individual color channels within an image to achieve desired color effects.</p> <p>8. Learners will proficiently apply the Vibrance adjustment in Adobe Photoshop to enhance or reduce the intensity of muted colors while preserving skin tones and preventing oversaturation.</p> <p>9. Learners will explore and experiment with the Photo Filter adjustment in Adobe Photoshop to apply warming or cooling color filters to an image for creative or corrective color effects.</p> <p>10. Learners will demonstrate proficiency in using adjustment layers to remove color casts from images in Adobe Photoshop, understanding how to use tools such as the White Balance or Color Balance adjustment to correct color temperature or tint issues.</p> <p>11. Learners will explore and apply the Black and White adjustment in Adobe Photoshop to convert color images to grayscale or monochrome while controlling the tonal values of individual color channels for creative or aesthetic effects.</p> | | | | | |
| 8 | Localized Adjustments and Photo Retouching | <p>Unit Level Outcomes:</p> <p>1. Learners will demonstrate proficiency in using toning tools in Adobe Photoshop, such as Dodge, Burn, and Sponge, to selectively adjust tonal values, highlights, shadows, and saturation in specific areas of an image.</p> <p>2. Learners will effectively utilize the Spot Healing Brush tool in Adobe Photoshop to remove small imperfections, blemishes, or unwanted objects from an image by automatically sampling surrounding pixels to blend seamlessly with the surrounding area.</p> <p>3. Learners will master the technique of using the Healing Brush tool in Adobe Photoshop to remove imperfections, scratches, or larger objects from an image by blending sampled pixels from a source area with the surrounding pixels to achieve a seamless repair.</p> <p>4. Learners will proficiently use the Patch Tool in Adobe Photoshop to remove larger areas of unwanted content from an image by selecting and replacing the area with content from another part of the image or a sampled source area.</p> <p>5. Learners will understand the concept and functionality of Content-Aware Fill in Adobe Photoshop, including its ability to intelligently fill in selected areas of an image with surrounding content while seamlessly blending with the rest of the image.</p> <p>6. Learners will explore and experiment with the Content-Aware Move tool in Adobe Photoshop, understanding how to select and move objects within an image while automatically filling in the original location with surrounding content.</p> <p>7. Learners will effectively use eraser tools in Adobe Photoshop to selectively remove portions of an image or adjustment layer, understanding how to adjust brush settings and opacity for precise and controlled erasing.</p> <p>8. Learners will demonstrate proficiency in sharpening images in Adobe Photoshop using techniques such as the Sharpen tool, Unsharp Mask filter, or High Pass filter to enhance image clarity, detail, and edge definition.</p> | <ul style="list-style-type: none"> ● Toning Tools ● Spot Healing Brush ● Healing Brush ● Patch Tool ● Content-aware Fill ● Content-aware Move ● Eraser Tools ● Sharpening an Image | 3 | - | 6 | 10 |

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| 9 | Type, Guides, and Grids | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate proficiency in using the Type Tool in Adobe Illustrator to create and edit text, understanding how to click on the canvas to create point text or click and drag to create area text boxes. 2. Learners will effectively utilize the Area Type Tool in Adobe Illustrator to flow text within a defined area or shape, understanding how to click and drag to create a text box and adjust its size and shape. 3. Learners will master the technique of displaying rulers in Adobe Illustrator, understanding how to enable rulers along the top and side of the canvas to provide visual reference for measuring and aligning objects. 4. Learners will proficiently use guides in Adobe Illustrator to assist with aligning and positioning objects, understanding how to create, move, and delete guides using the ruler guides or the Guide panel. 5. Learners will understand how to add a guide layout in Adobe Illustrator, including defining guide positions and spacing to create custom grid layouts for aligning and organizing artwork elements. 6. Learners will explore and utilize smart guides in Adobe Illustrator, understanding how to enable smart guides to dynamically snap objects to alignment guides, anchor points, paths, and spacing cues for precise positioning. 7. Learners will effectively show the grid in Adobe Illustrator, understanding how to toggle the visibility of the grid lines to provide additional visual reference for aligning and spacing objects on the canvas. 8. Learners will customize grid preferences in Adobe Illustrator, including adjusting gridline color, spacing, subdivisions, and units to suit specific design requirements and workflow preferences. | <ul style="list-style-type: none"> • Type Tool • Area Type Tool • Displaying Rulers • Using Guides • Add a Guide Layout • Smart Guides • Showing the Grid • Grid Preferences | 3 | - | 6 | 10 |
| 10 | Libraries, Output, and Updates | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate proficiency in using Creative Libraries in Adobe Creative Cloud applications, understanding how to create, organize, and access libraries of assets such as graphics, colors, character styles, and logos for reuse across projects. 2. Learners will effectively utilize Shared Libraries in Adobe Creative Cloud, understanding how to collaborate with team members by sharing and accessing libraries of assets across multiple users and devices. 3. Learners will master the technique of saving files in Adobe Creative Cloud applications, including saving projects locally or to the cloud storage provided by Adobe Creative Cloud, understanding how to specify file formats, names, and locations. 4. Learners will proficiently use the Quick Export feature in Adobe Creative Cloud applications to quickly export artwork or designs in commonly used file formats such as JPEG, PNG, or PDF, understanding how to adjust export settings and quality options as needed. | <ul style="list-style-type: none"> • Creative Libraries • Shared Libraries • Saving Files • Quick Export | 3 | - | 6 | 10 |

NOS/Module Name: Understand and Develop a website

NOS/Module Code: MSME/GWD/03

NOS/Module Outcome:

- Understand the basics of the web, including the Internet and URLs.
- Gain knowledge of HTML and its components, such as tags, attributes, and elements.
- Learn how to structure and format text, create hyperlinks, and insert images in HTML.
- Understand the concept of fair use and copyright in relation to web content.
- Learn how to create lists, tables, and apply styling using HTML.
- Understand the difference between CSS and HTML and how to style web pages using CSS.
- Gain proficiency in using CSS selectors, including selecting by tag, class, and id.
- Understand the cascade and the order of selector precedence in CSS.
- Apply the concepts learned to create a personal homepage project.
- Explore advanced topics in HTML and CSS, including splitting sites into separate files and combining CSS selectors.
- Learn about user interface design techniques and considerations for creating engaging interfaces.
- Gain knowledge of accessibility issues and readability in web design.
- Understand the concept of lite sites and rapid prototyping for web development.
- Learn about user testing and the importance of iterating and collaborating in web design projects.
- Apply the concepts covered in the course to create a final project, demonstrating creativity and project scoping skills.
- Understand the principles of responsive web design and how to implement it using Bootstrap.
- Learn about common device dimensions, the grid system, and CSS media queries for responsive design.
- Gain proficiency in using JavaScript for client-side scripting, including variables, conditions, loops, and functions.
- Learn the basics of jQuery, including its features, syntax, and commonly used actions and plugins.
- Explore Adobe Flash/Animate and learn how to create animations, banners, intros, and websites using the software.
- Understand the basics of web hosting, including different hosting packages, domain registration, and using control panels.
- Learn how to create emails and use FTP clients for website maintenance.

Theory Hours: NA Practical Hours: 210 Theory Marks: NA Practical Marks: 100

| Unit No | Unit Name | Unit Outcome | Content (Chapter/Topics) | PR Hours | Marks |
|---------|------------------------------------|---|--|----------|-------|
| 1 | Getting Started - What is the Web? | Unit Level Outcomes: 1. Learners will understand the basics of web technologies through the introduction of the subject, including its significance, evolution, and its role in modern society. 2. Learners will effectively set goals for their learning journey in web technologies, understanding the importance of defining clear objectives and milestones to track progress and measure success. 3. Learners will comprehend the concept of the Internet, including its infrastructure, protocols, and global connectivity that enables the transfer of data and communication across networks. 4. Learners will master the understanding of Uniform Resource Locators (URLs), including their structure, components, and how they are used to identify and locate resources on the World Wide Web. | <ul style="list-style-type: none">• Subject introduction• Goal setting• The Internet• URLs• How a web page gets to your computer | 4 | 4 |

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|---|-----------------------------|--|---|----|----|
| | | 5. Learners will explore the process of how a web page is requested and delivered to their computer, including concepts such as DNS resolution, HTTP request-response cycle, and data transmission over the Internet. | | | |
| 2 | HTML - Structuring Websites | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the process of building web pages, including the role of markup languages and their significance in structuring content for the web. 2. Learners will effectively distinguish markup languages, focusing on HTML (Hypertext Markup Language) as the primary language used for creating web pages. 3. Learners will comprehend HTML tags, recognizing their syntax, purpose, and usage in defining the structure and content of web pages. 4. Learners will master the concept of HTML attributes, understanding how they provide additional information or functionality to HTML elements. 5. Learners will be able to identify HTML elements, understanding their role in organizing and presenting content within a web page. 6. Learners will analyze the anatomy of an HTML page, including the essential components such as the document type declaration, `<code><html></code>`, `<code><head></code>`, and `<code><body></code>` tags. 7. Learners will effectively format text using HTML, including applying basic text formatting such as headings, paragraphs, emphasis, and strong emphasis. 8. Learners will proficiently create hyperlinks using HTML `<code><a></code>` tags, understanding how to link to other web pages, resources, or email addresses. 9. Learners will demonstrate the ability to embed images in web pages using HTML `<code></code>` tags, understanding how to specify image sources, alternative text, and image dimensions. 10. Learners will understand the concept of copyright fair use in the context of web content, including guidelines and best practices for using copyrighted materials legally and ethically. 11. Learners will effectively create lists using HTML `<code></code>`, `<code></code>`, and `<code></code>` tags, understanding how to create unordered lists (bulleted) and ordered lists (numbered). 12. Learners will demonstrate proficiency in nesting HTML tags, understanding how to structure and organize content hierarchically by placing tags within other tags. 13. Learners will proficiently create tables using HTML `<code><table></code>`, `<code><tr></code>`, `<code><td></code>`, and `<code><th></code>` tags, understanding how to define rows and columns to present tabular data. 14. Learners will explore styling web pages using HTML, including inline styles and internal stylesheets to apply basic formatting and layout to HTML elements. 15. Learners will understand the concept of HTML colors, including using color names, hexadecimal notation, and RGB values to specify colors for text, backgrounds, and other elements on web pages. | <ul style="list-style-type: none"> • How do we build web pages? • Markup Languages • HTML • HTML tags • HTML attributes • HTML elements • The Anatomy of an HTML page • Formatting text • Hyperlinks • Images • Copyright fair use • Lists • Nesting tags • Tables • Styling with HTML • HTML Colours | 30 | 10 |
| 3 | CSS - Styling Websites | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the process of styling web pages using CSS (Cascading Style Sheets), including its role in defining the presentation and layout of HTML content. 2. Learners will effectively distinguish between CSS and HTML, recognizing CSS as the language used to apply styles and aesthetics to HTML elements. 3. Learners will comprehend CSS selectors, understanding how they are used to target specific HTML elements for styling. 4. Learners will demonstrate proficiency in selecting | <ul style="list-style-type: none"> • How do we style web pages? • CSS vs HTML • CSS Selectors • Selecting by tag • Selecting by class • Selecting by id • The Cascade (order of selector precedence) | 20 | 10 |

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| | | <p>HTML elements by tag name using CSS, understanding how to apply styles to all instances of a particular HTML element.</p> <p>5. Learners will effectively select HTML elements by class using CSS, understanding how to apply styles to specific groups of elements sharing the same class attribute.</p> <p>6. Learners will proficiently select HTML elements by ID using CSS, understanding how to apply styles to individual elements with unique identifiers.</p> <p>7. Learners will understand the concept of the Cascade in CSS, including the order of selector precedence and how styles are applied based on specificity, inheritance, and the order of appearance in the stylesheet.</p> | | | |
| 4 | Project - Create Your Homepage | <p>Unit Level Outcomes:</p> <p>1. Learners will integrate the concepts learned in previous units, including HTML structure, CSS styling, and basic web development principles, to create a homepage for a personal or fictional website.</p> <p>2. Learners will demonstrate creativity and critical thinking skills in applying the concepts learned to design and develop a unique and visually appealing web page.</p> <p>3. Learners will effectively apply HTML markup to structure the content of their homepage, including headings, paragraphs, lists, images, hyperlinks, and other relevant elements.</p> <p>4. Learners will proficiently use CSS to style their homepage, including defining colors, fonts, layouts, and other visual properties to enhance the appearance and usability of the web page.</p> <p>5. Learners will demonstrate problem-solving skills in overcoming challenges and implementing desired features or design elements in their homepage project.</p> <p>6. Learners will effectively collaborate, share ideas, and provide feedback to peers during the design and development process, fostering a supportive and collaborative learning environment.</p> <p>7. Learners will present their completed homepage projects, explaining their design choices, thought process, and implementation strategies, demonstrating their understanding and mastery of web development concepts.</p> | <ul style="list-style-type: none"> Combination of the concepts learned thus far Allow students to think creatively about the applications of the concepts they have learned Designing a web page from scratch | 12 | 8 |
| 5 | Advanced HTML and CSS | <p>Unit Level Outcomes:</p> <p>1. Learners will demonstrate proficiency in splitting their website into separate HTML files, understanding how to organize and modularize content for better maintainability and scalability.</p> <p>2. Learners will effectively use iframes and embedding techniques to integrate external content such as videos, maps, or social media feeds into their web pages, enhancing user experience and functionality.</p> <p>3. Learners will understand the purpose and usage of `<div>` elements in HTML, including how to use them as container elements for grouping and styling content blocks on web pages.</div></p> <p>4. Learners will proficiently use `` elements in HTML to apply inline styling or manipulate specific portions of text within larger content blocks, enhancing visual presentation and semantics.</p> <p>5. Learners will demonstrate mastery in combining CSS selectors to target specific HTML elements with complex or specific styling requirements, understanding how to use compound selectors, descendant selectors, and attribute selectors effectively.</p> <p>6. Learners will explore and apply special CSS selectors such as pseudo-classes (`.hover`, `.focus`, `.nth-child()`) and pseudo-elements (`.before`, `.after`) to create interactive and dynamic effects or style elements based on their</p> | <ul style="list-style-type: none"> Splitting your site into separate files iframes and embedding <code><div></code> <code></code> Combining CSS selectors Special CSS selectors Reading documentation Avoiding repeated code | 16 | 10 |

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| | | <p>position or state.</p> <p>7. Learners will develop the ability to read and understand documentation for HTML and CSS, including official specifications, tutorials, reference guides, and online resources, to deepen their understanding and expand their knowledge of web development techniques and best practices.</p> <p>8. Learners will effectively avoid repeated code in their HTML and CSS files, understanding the importance of modularity, reusability, and maintainability in web development, and employing techniques such as classes, inheritance, and mixins to streamline their codebase.</p> | | | |
| 6 | Designing User Interfaces | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the key factors that contribute to an engaging user interface (UI), including usability, aesthetics, clarity, consistency, and responsiveness. 2. Learners will explore various UI design techniques, including layout design, typography, color theory, visual hierarchy, and navigation patterns, to create intuitive and visually appealing interfaces. 3. Learners will recognize and address accessibility issues in UI design, including ensuring compatibility with assistive technologies, providing alternative text for images, and designing with consideration for users with disabilities. 4. Learners will demonstrate proficiency in optimizing readability in UI design, including selecting appropriate font styles, sizes, and line spacing, and ensuring sufficient contrast between text and background elements. 5. Learners will understand the concept of lite sites, including designing lightweight and fast-loading interfaces optimized for low-bandwidth or mobile environments, and employing techniques such as responsive design and lazy loading. 6. Learners will explore rapid prototyping techniques, including wireframing, mockups, and interactive prototypes, to quickly visualize and iterate on UI designs and gather feedback from stakeholders. 7. Learners will conduct user testing to evaluate the effectiveness and usability of UI designs, including observing user interactions, collecting feedback, and iteratively refining designs based on user feedback and usability testing results. | <ul style="list-style-type: none"> • What makes an engaging interface? • Various User Interface (UI) Design techniques • Accessibility issues • Readability • Lite sites • Rapid prototyping • User testing | 12 | 8 |
| 7 | Final Project | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate creativity and critical thinking skills in applying the concepts covered in the course to design and develop a website project from scratch. 2. Learners will effectively scope their project by defining clear objectives, requirements, and deliverables, considering factors such as target audience, purpose, functionality, and design aesthetic. 3. Learners will design a website from scratch, including creating wireframes, mockups, and prototypes to visualize and communicate the structure, layout, and user experience of the website. 4. Learners will practice incremental development by breaking down the website project into manageable tasks or features and implementing them iteratively, allowing for continuous feedback and improvement. 5. Learners will create and iterate on prototypes of their website project, using tools such as Adobe XD, Sketch, Figma, or InVision to design interactive prototypes for user testing and feedback. 6. Learners will conduct user testing to evaluate the usability, effectiveness, and user experience of | <ul style="list-style-type: none"> • Allow students to think creatively about the applications of the concepts covered in the course • Scoping a project • Designing a website from scratch • Incremental development • Creating and iterating on prototypes • User testing • Collaboration | 20 | 10 |

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| | | <p>their website prototypes, gathering feedback from target users and iterating on designs based on user feedback.</p> <p>7. Learners will collaborate with peers, instructors, or stakeholders throughout the website development process, sharing ideas, providing feedback, and working together to achieve project goals and deliverables.</p> | | | |
| 8 | Responsive Web Design with Bootstrap | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the principles of responsive design, including the importance of creating websites that adapt and respond to various screen sizes and devices. 2. Learners will be introduced to Bootstrap, a popular front-end framework for building responsive and mobile-first websites. 3. Learners will grasp design concepts for both mobile and desktop layouts, including considerations for layout, navigation, typography, and content hierarchy. 4. Learners will successfully install Bootstrap and set up their development environment for building responsive websites. 5. Learners will familiarize themselves with common device dimensions and breakpoints used in responsive design to ensure consistency across different devices. 6. Learners will master the Bootstrap grid system, understanding how to create flexible and responsive layouts using rows, columns, and responsive utility classes. 7. Learners will understand the role of the viewport meta tag in controlling the layout and scaling of web pages on mobile devices. 8. Learners will effectively implement forms in their Bootstrap-based websites, including styling form elements and utilizing Bootstrap's form components and validation features. 9. Learners will demonstrate proficiency in using CSS media queries to apply custom styles and layout adjustments based on screen size and device orientation. 10. Learners will utilize Bootstrap's button styles and classes to create visually appealing and consistent buttons for their websites. 11. Learners will implement menu conversion scripts to create responsive navigation menus that adapt to different screen sizes and devices. 12. Learners will integrate icons into their Bootstrap-based websites using icon libraries such as Font Awesome or Bootstrap Icons. 13. Learners will create custom layouts using Bootstrap's grid system and CSS3 features such as flexbox and grid layout. 14. Learners will apply CSS3 features to enhance the layout and appearance of their Bootstrap-based websites, including animations, transitions, shadows, and gradients. | <ul style="list-style-type: none"> • Introduction to Responsive Design • Introduction to Bootstrap • Design concepts (Mobile & Desktop) • Installation of Bootstrap • Common Device Dimensions • Grid System • View-Port Tag • Forms • CSS Media Queries • Buttons • Menu Conversion Script • Icons Integration • Custom Layout • CSS3 in Layout | 24 | 12 |
| 9 | Java Script | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the concept of client-side scripting and its role in enhancing web interactivity and functionality. 2. Learners will be introduced to JavaScript as a programming language for client-side scripting, including its syntax, features, and capabilities. 3. Learners will comprehend JavaScript types, including primitive data types (such as numbers, strings, booleans) and complex data types (such as arrays and objects). 4. Learners will effectively declare and use variables in JavaScript, understanding variable scope, hoisting, and best practices for naming conventions. 5. Learners will demonstrate proficiency in using operators in JavaScript, including arithmetic, | <ul style="list-style-type: none"> • Introduction to Client-Side Scripting • Introduction to Java Script • JavaScript Types • Variables in JS • Operators in JS • Conditions Statements • Java Script Loops • JS Popup Boxes • JS Events • JS Arrays • Working with Arrays • JS Objects • JS Functions • Using Java Script in | 32 | 10 |

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| | | <p>assignment, comparison, logical, and bitwise operators.</p> <p>6. Learners will master conditional statements in JavaScript, including if statements, else statements, switch statements, and ternary operators for making decisions and controlling program flow.</p> <p>7. Learners will proficiently implement JavaScript loops, including for loops, while loops, and do-while loops, for iterating over arrays, objects, or performing repetitive tasks.</p> <p>8. Learners will understand and utilize JavaScript popup boxes, including alert, confirm, and prompt dialogs, for displaying messages, confirming actions, and receiving user input.</p> <p>9. Learners will explore JavaScript events, including mouse events, keyboard events, form events, and document events, for handling user interactions and triggering script execution.</p> <p>10. Learners will effectively work with arrays in JavaScript, including creating, accessing, modifying, and iterating over arrays to store and manipulate collections of data.</p> <p>11. Learners will demonstrate proficiency in using JavaScript objects, including creating object literals, accessing object properties, and using object methods for organizing and manipulating data.</p> <p>12. Learners will implement JavaScript functions, including declaring functions, passing arguments, returning values, and using function expressions and arrow functions for code reuse and abstraction.</p> <p>13. Learners will apply JavaScript in real-time scenarios, including enhancing web forms with form validation, implementing interactive features, and manipulating DOM elements dynamically.</p> <p>14. Learners will demonstrate the ability to validate web forms using JavaScript, including implementing client-side validation logic to ensure data integrity and enhance user experience.</p> | <p>Realtime</p> <ul style="list-style-type: none"> Validation of Forms | | |
| 10 | jQuery | <p>Unit Level Outcomes:</p> <p>1. Learners will understand the purpose and benefits of using jQuery as a JavaScript library for simplifying DOM manipulation, event handling, and animation on web pages.</p> <p>2. Learners will be introduced to the features and capabilities of jQuery, including its lightweight nature, cross-browser compatibility, and extensive collection of plugins.</p> <p>3. Learners will successfully install jQuery and integrate it into their web projects, understanding different methods such as downloading the library locally or linking to a CDN (Content Delivery Network).</p> <p>4. Learners will grasp the syntax of jQuery, including how to select DOM elements using jQuery selectors and perform actions on them using jQuery methods.</p> <p>5. Learners will demonstrate proficiency in using the jQuery ready function to ensure that JavaScript code is executed only after the DOM has fully loaded, improving performance and preventing issues with accessing DOM elements.</p> <p>6. Learners will effectively utilize jQuery selectors to target and manipulate HTML elements on web pages, including selecting elements by tag name, class, ID, attribute, or traversing the DOM tree.</p> <p>7. Learners will master jQuery actions, including methods for manipulating HTML content, handling events, animating elements, and making AJAX requests for dynamic data retrieval.</p> <p>8. Learners will explore jQuery plugins, understanding how to extend the functionality of jQuery by integrating pre-built plugins for common tasks such as form validation, sliders, dropdown</p> | <ul style="list-style-type: none"> Introduction to jQuery jQuery Features Installing jQuery jQuery Syntax jQuery Ready Function jQuery Selectors jQuery Actions jQuery plugins jQuery Validation plugin jQuery Slideshow jQuery Dropdown | 16 | 8 |

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| | | <p>menus, and more.</p> <p>9. Learners will implement the jQuery Validation plugin to add client-side form validation to their web forms, ensuring that user input meets specified criteria before submission.</p> <p>10. Learners will create jQuery slideshows using plugins or custom scripts, allowing for the dynamic display of images or content in a slideshow format with various transition effects.</p> <p>11. Learners will implement jQuery dropdown menus to enhance website navigation, including creating dropdown menus that respond to user interactions such as hover or click events.</p> | | | |
| 11 | Adobe Flash / Animate | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the principles and techniques of animation, including the use of motion, timing, and sequencing to create the illusion of movement. 2. Learners will be introduced to Adobe Flash (now Adobe Animate), understanding its role as a powerful tool for creating interactive and multimedia-rich animations for the web and other platforms. 3. Learners will become familiar with the tools available in Adobe Flash for creating and manipulating shapes, text, symbols, and other graphic elements within the application. 4. Learners will master shape tweening and motion tweening techniques in Adobe Flash, understanding how to transform shapes and objects smoothly between keyframes to create fluid animations. 5. Learners will explore frame-by-frame animation in Adobe Flash, including creating animations by manually adjusting objects and properties on individual frames. 6. Learners will experiment with various Flash effects, including filters, blending modes, and special effects, to enhance the visual appeal and creativity of their animations. 7. Learners will demonstrate proficiency in creating Flash banners, understanding how to design and animate banners for advertising and promotional purposes on websites and other digital platforms. 8. Learners will create Flash intros, including short animated sequences that introduce a website or multimedia project, capturing attention and setting the tone for the user experience. 9. Learners will design and develop Flash websites, understanding how to create interactive interfaces, navigation systems, and multimedia content using Adobe Flash. 10. Learners will grasp the basics of ActionScripting, the programming language used in Adobe Flash for creating interactive elements, animations, and dynamic content. They will understand concepts such as variables, functions, events, and basic interactivity. | <ul style="list-style-type: none"> ● Introduction to Animation ● Introduction to Adobe Flash ● Tools in Adobe Flash ● Shape Tween and Motion Tween ● Frame Animation ● Various Flash Effects ● Creating Flash Banners ● Creating Flash Intro's ● Creating Flash Website ● Basics of Action Scripting. | 16 | 8 |
| 12 | Web Hosting | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will understand the fundamentals of web hosting, including the concept of hosting servers, storage space, bandwidth, and server management. 2. Learners will be introduced to different types of hosting packages, including shared hosting, virtual private servers (VPS), dedicated hosting, and cloud hosting, understanding their features, benefits, and use cases. 3. Learners will comprehend the process of registering domain names, including selecting a domain registrar, searching for available domain names, and completing the registration process. 4. Learners will demonstrate proficiency in defining name servers for domain names, understanding how to point domain names to the appropriate | <ul style="list-style-type: none"> ● Web Hosting Basics ● Types of Hosting Packages ● Registering domains ● Defining Name Servers ● Using Control Panel ● Creating Emails in cPanel ● Using FTP Client ● Maintaining a website | 8 | 2 |

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| | | hosting servers using DNS (Domain Name System) settings. 5. Learners will effectively use control panel software such as cPanel or Plesk to manage web hosting accounts, including tasks such as creating subdomains, managing databases, and configuring security settings. 6. Learners will demonstrate the ability to create email accounts associated with their domain names using control panel software, understanding how to set up email addresses, manage email forwarding, and configure email clients. 7. Learners will effectively use FTP (File Transfer Protocol) clients to upload, download, and manage files on web hosting servers, understanding how to connect to hosting accounts securely and transfer files between local computers and remote servers. 8. Learners will understand the importance of maintaining a website, including regular backups, software updates, security monitoring, and performance optimization, to ensure the reliability, security, and performance of their web presence. | | | |
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NOS /Module: Understanding to Work with Figma & Adobe XD

NOS /Module Code: MSME/GWD/04

Outcomes:

After completion of course Student should be able to:

1. Understand User-Centered Design: Embrace the user-centered approach to design, putting user needs and preferences at the forefront of the design process.
2. Conduct User Research: Plan, execute, and analyze user research, including user interviews, surveys, and usability testing to inform design decisions.
3. Create Wireframes and Prototypes: Develop wireframes and interactive prototypes to visualize and test design concepts and user interactions.
4. Design User-Friendly Interfaces: Craft aesthetically pleasing and intuitive user interfaces that facilitate efficient and enjoyable user experiences.
5. Implement Interaction Design: Apply principles of interaction design to create meaningful and engaging user interactions through elements like buttons, navigation, and forms.
6. Design for Mobile and Responsive Web: Develop designs that are responsive and adaptive, ensuring a seamless experience across various devices and screen sizes.
7. Information Architecture: Organize content effectively, creating clear hierarchies and navigation structures that aid user understanding and content discoverability.

Theory Hours: NA

Practical Hours: 120 OJT: 60

Practical Marks: 100

| Unit No. | Unit Name | Unit level outcomes | Contents (chapters/topics) | PR Hours | PR Marks |
|----------|-----------|---------------------|----------------------------|----------|----------|
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| 1 | Figma Unit 1 | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will differentiate between User Experience (UX) and User Interface (UI), understanding that UX focuses on the overall experience and satisfaction of users when interacting with a product, while UI focuses on the visual and interactive aspects of the product. 2. Learners will be introduced to Figma as a design tool for creating user interfaces and collaborative design projects, understanding its features, benefits, and applications in the design process. 3. Learners will successfully download and install Figma to their desktop computers, understanding the steps involved in the installation process and ensuring that they have access to the software for hands-on practice. 4. Learners will familiarize themselves with the Figma interface and dashboard, understanding the layout, navigation, and organization of tools, panels, and features within the application. 5. Learners will demonstrate proficiency in navigating the Figma interface, including accessing and managing projects, creating and editing design files, and collaborating with team members using cloud-based features. 6. Learners will explore and understand the various tools and panels available in the Figma interface, including the canvas area, layers panel, properties panel, design tools, and prototyping features. | <ol style="list-style-type: none"> 1. The difference between UX and UI 2. Intro To Figma and Download & Install Figma to your desktop 3. Figma Interface/Dashboard | 8 | 6 |
| 2 | Unit 2 | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 4. Learners will successfully import Figma files into the Figma application, understanding the process and options available for importing design files from external sources or other Figma projects. 5. Learners will explore the various tools available in Figma for designing user interfaces, including selection tools, drawing tools, shape tools, text tools, and other tools for creating and editing design elements. 6. Learners will understand the functionality of the Layers panel in Figma, including organizing design elements into layers, rearranging layers, renaming layers, and adjusting layer properties for better organization and management of design files. 7. Learners will explore the concept of components in Figma, understanding how components allow for reusability and consistency in design by creating reusable elements such as buttons, icons, and | <ol style="list-style-type: none"> 4. Import Figma Files in Figma 5. Tools in Figma 6. Figma Layers Panel 7. Figma Components | 8 | 6 |

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| | | navigation bars that can be easily replicated and updated throughout a design project. | | | |
| 3 | Unit 3 | <p>Unit Level Outcomes:</p> <p>8. Learners will explore the Design tab/panel in Figma, understanding its role in controlling design-related settings such as layout grids, spacing, and constraints to ensure consistent and responsive design across different devices and screen sizes.</p> <p>9. Learners will demonstrate proficiency in using the Text tool in Figma to add text elements to their designs, including typing, formatting, and styling text using various font options, sizes, weights, and styles available in the application.</p> <p>10. Learners will effectively incorporate images into their designs in Figma, understanding how to import, place, resize, crop, and manipulate images within their design projects to enhance visual appeal and convey information effectively.</p> | <p>8. Design Tab/Panel</p> <p>9. Text Tool and Fonts</p> <p>10. Images in Figma</p> | 8 | 6 |
| 4 | Unit 4 | <p>Unit Level Outcomes:</p> <p>11. Learners will master Boolean operations in Figma, understanding how to use Union, Subtract, Intersect, and Exclude operations to create complex shapes and vector-based designs by combining or subtracting overlapping shapes.</p> <p>12. Learners will demonstrate proficiency in alignment and distribution techniques in Figma, including aligning objects relative to each other or to the canvas, as well as distributing objects evenly along a horizontal or vertical axis to achieve balanced and visually appealing layouts.</p> <p>13. Learners will explore Figma Team Libraries, understanding their role in facilitating collaboration and maintaining design consistency across projects by allowing teams to share and access reusable components, styles, and assets.</p> <p>14. Learners will understand the Code Panel in Figma, including its capabilities for inspecting and exporting design elements and specifications, generating CSS and SVG code for developers, and ensuring seamless handoff between designers and developers during the design-to-development process.</p> | <p>11. Boolean Operations in Figma</p> <p>12. Alignment & Distribution Figma</p> <p>13. Figma Team Libraries</p> <p>14. The Code Panel in Figma</p> | 8 | 6 |
| 5 | Unit 5 | <p>Unit Level Outcomes:</p> <p>15. Learners will effectively use prototyping features in Figma, understanding how to create interactive prototypes by linking frames, adding hotspots, and</p> | <p>15. Prototyping in Figma</p> <p>16. Horizontal & Vertical Scrolling</p> | 8 | 6 |

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| | | <p>defining interactions such as click, hover, and drag to simulate user flows and demonstrate functionality.</p> <p>16. Learners will explore horizontal and vertical scrolling techniques in Figma, understanding how to create scrollable areas within frames to accommodate content that extends beyond the viewport, such as long pages or lists.</p> <p>17. Learners will demonstrate proficiency in using masks in Figma to control the visibility of design elements and create clipping masks for displaying content within defined shapes or boundaries, enhancing visual presentation and layout flexibility.</p> <p>18. Learners will understand the process of exporting assets and design files from Figma, including exporting to common image formats such as JPG, PNG, and SVG, as well as exporting to PDF for documentation purposes. Additionally, learners will learn to save their Figma projects into the .fig format for version control and future editing.</p> | <p>17. Masks in Figma</p> <p>18. Figma Exports .JPG .PNG .SVG .PDF Save Project into .fig</p> | | |
| 6 | Unit 6 | <p>Unit Level Outcomes:</p> <p>19. Learners will gain proficiency in creating mockups in Photoshop, understanding how to use the software to visualize and present designs in a realistic context, including techniques for creating device mockups, screen presentations, and product prototypes.</p> <p>20. Learners will explore the use of plugins in Figma to extend its functionality and streamline design workflows, understanding how plugins can enhance productivity, automate repetitive tasks, and add new features and capabilities to the application.</p> <p>21. Learners will identify and evaluate five must-have plugins for Figma designers, understanding their features, benefits, and use cases. Additionally, learners will demonstrate proficiency in installing, configuring, and utilizing these plugins to improve their design process and productivity in Figma.</p> | <p>19. Mockup in photoshop</p> <p>20. Plugins in Figma</p> <p>21. 5 MUST HAVE Plugins For Figma Designers!</p> | 8 | 7 |
| 7 | Unit 7 | <p>Unit Level Outcomes:</p> <p>22. Learners will understand the concept of wireframing as a fundamental step in the design process, involving the creation of low-fidelity sketches or layouts to define the structure, layout, and functionality of a digital product or website.</p> <p>23. Learners will gain proficiency in wireframing with Figma, understanding how to use the software to create wireframes for digital products, including techniques for laying out content, defining navigation</p> | <p>22. What Is Wireframing?</p> <p>23. Wireframing with Figma</p> <p>24. How To Create Wireframe in wireframe.cc</p> | 8 | 7 |

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| | | flows, and communicating design concepts effectively. | | | |
| | | 24. Learners will explore the process of creating wireframes in wireframe.cc, understanding its features and capabilities for quickly sketching and prototyping user interfaces, wireframes, and mockups with a focus on simplicity and ease of use. | | | |
| 8 | Unit 8 | <p>Unit Level Outcomes:</p> <p>25. Learners will demonstrate the ability to create a new project and file in Figma, understanding the steps involved in setting up a new design project, creating artboards or frames, and organizing design files within the application.</p> <p>26. Learners will explore real-time collaboration features in Figma, understanding how to collaborate with team members or stakeholders in real-time by sharing design files, providing feedback, and making simultaneous edits to design projects. They will understand the benefits of real-time collaboration, including improved communication, increased productivity, and streamlined workflows in design teams.</p> | <p>25. Create a New Project and File in Figma</p> <p>26. Collaborate in real-time(Teams)</p> | 8 | 7 |
| 9 | Adobe XD Unit 9 | <p>Unit Level Outcomes:</p> <p>1. Learners will gain an understanding of User Experience (UX) principles, including the importance of designing products and interfaces that provide meaningful and satisfying experiences for users.</p> <p>2. Learners will become familiar with the Adobe XD interface and its basic functionalities, enabling them to navigate the software and perform essential tasks to create user interfaces and interactive prototypes.</p> <p>3. Learners will differentiate between User Interface (UI) and User Experience (UX), understanding that UI focuses on the visual and interactive aspects of a product, while UX encompasses the overall experience and satisfaction of users when interacting with the product.</p> <p>4. Learners will understand the concept of a UX brief and persona in the design process, including the importance of defining project goals, user needs, and target audience characteristics to inform design decisions and create user-centered solutions.</p> | <p>·Introduction to UX</p> <p>·Getting started</p> <p>·What is UI vs UX</p> <p>·The UX brief & persona</p> | 8 | 7 |

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| 10 | Unit 10 | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate proficiency in creating low-fidelity wireframes in Adobe XD, understanding how to use simple shapes and placeholders to outline the structure and layout of a digital product or interface. 2. Learners will explore existing UI kits available in Adobe XD, understanding their role in providing pre-designed components, elements, and templates that can be used to streamline the design process and maintain consistency in UI design. 3. Learners will master working with type in Adobe XD, understanding how to add text elements, format typography, and apply typographic principles to enhance readability and visual hierarchy in UI designs. 4. Learners will grasp the basics of color theory and button design in UI design, including selecting appropriate color schemes, applying colors to UI elements, and designing visually appealing and user-friendly buttons for interactive elements. | <ul style="list-style-type: none"> ·Wireframing (low fidelity) ·Existing UI kits ·Working with type ·Basic colors& buttons | 8 | 7 |
| 11 | Unit 11 | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will explore resources for obtaining free UI icons, understanding how to integrate them into Adobe XD projects to enhance visual design and user experience. 2. Learners will understand the importance of designing footers in UI layouts, including providing essential navigation links, contact information, and other relevant content. They will also learn to use Lorem Ipsum placeholder text as a temporary measure for content filling. 3. Learners will gain proficiency in creating new pages and artboards in Adobe XD, understanding how to organize and structure their design projects effectively to accommodate multiple screens or sections. 4. Learners will apply their knowledge and skills to complete Project 01, focusing on wireframing a digital product or interface using Adobe XD. They will demonstrate the ability to translate design concepts into wireframe prototypes that outline the structure, layout, and functionality of the product. 5. Learners will explore prototyping and interactivity features in Adobe XD, understanding how to create interactive prototypes by linking artboards, defining navigation flows, and adding interactive elements such as buttons, menus, and gestures to simulate user interactions and demonstrate functionality. | <ul style="list-style-type: none"> ·Free UI Icons ·Footer & Lorem Ipsum ·New Pages & Artboards ·Project 01 - Wireframe ·Prototyping & Interactivity | 8 | 7 |

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| 12 | Unit 12 | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will demonstrate the ability to create popup modals in Adobe XD, understanding how to design and prototype modal windows for displaying additional content or interactive elements within a user interface. 2. Learners will apply their skills to complete Project 02, focusing on creating a prototype for a digital product or interface using Adobe XD. They will demonstrate proficiency in translating design concepts into interactive prototypes that showcase the functionality and user experience of the product. 3. Learners will understand the concept of groups and isolation mode in Adobe XD, including techniques for organizing and managing layers and elements within a design project to maintain clarity and efficiency. 4. Learners will master the use of symbols in Adobe XD, understanding their role in creating reusable design elements and maintaining consistency across multiple artboards or screens within a project. 5. Learners will explore techniques for creating production videos in Adobe XD, including capturing and exporting video recordings of interactive prototypes to showcase design concepts and functionality to stakeholders or clients. 6. Learners will learn to use the repeat grid feature in Adobe XD, understanding how to quickly create and replicate layout patterns or design elements such as lists, grids, and card layouts for efficient design workflows. 7. Learners will understand how to update symbols and repeat grids in Adobe XD, including techniques for making changes to master components or grid items and propagating those changes across instances throughout a design project. | <ul style="list-style-type: none"> ·Create a Popup Modal ·Project 02 - Prototype ·Groups & Isolation Mode ·How to use symbols ·Production Video - Left Nav ·Repeat Grid ·Updating symbols and repeat grids | 8 | 7 |
| 13 | Unit 13 | <p>Unit Level Outcomes:</p> <ol style="list-style-type: none"> 1. Learners will explore various prototype tricks in Adobe XD, including advanced techniques for creating interactive and dynamic prototypes, such as using overlays, timed transitions, drag gestures, and keyboard triggers. 2. Learners will master navigation tips and tricks in Adobe XD, understanding how to optimize navigation design for better user experience, including techniques for creating navigation bars, menus, breadcrumbs, and interactive navigation elements. 3. Learners will apply their skills to complete Project 03, | <ul style="list-style-type: none"> ·Prototype Tricks ·Navigation Tips and Tricks ·Project 03 - Symbols ·Mocking Up an app ·XD App on your phone | 8 | 7 |

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| | | <p>focusing on using symbols in Adobe XD to create reusable design components and maintain consistency across multiple screens or artboards within a project.</p> <p>4. Learners will gain proficiency in mocking up an app in Adobe XD, understanding how to translate design concepts into high-fidelity prototypes for mobile applications, including designing screens, adding interactions, and prototyping user flows.</p> <p>5. Learners will learn to preview Adobe XD prototypes on their mobile devices using the XD app, understanding how to sync design files, view prototypes, and test interactions directly on iOS or Android devices for real-time feedback and usability testing.</p> | | | |
| 14 | Unit 14 | <p>Unit Level Outcomes:</p> <p>1. Learners will understand the significance of iPhone and Android status icons in mobile app design, including common icons used to indicate device status, notifications, connectivity, and system functions.</p> <p>2. Learners will learn techniques for fixing the position of elements in Adobe XD, ensuring that UI elements remain anchored or positioned correctly within the design layout across different screen sizes and orientations.</p> <p>3. Learners will create production videos focusing on the login process of a digital product or application using Adobe XD, demonstrating proficiency in capturing and exporting video recordings of interactive prototypes to showcase design concepts and functionality.</p> <p>4. Learners will explore methods for sharing wireframes and design prototypes with stakeholders, team members, or clients using Adobe XD, including techniques for generating shareable links, inviting collaborators, and presenting design concepts for feedback and review.</p> | <ul style="list-style-type: none"> ·iPhone & Android status icons ·Fixing the position ·Production Video - Login ·Sharing wireframes | 8 | 7 |
| 15 | Unit 15 | <p>Unit Level Outcomes:</p> <p>1. Learners will gain proficiency in recording interactions within Adobe XD, understanding how to capture and document user interactions, such as clicks, taps, swipes, and transitions, to create interactive design prototypes.</p> <p>2. Learners will engage in a class project focused on wireframe feedback, where they will share their wireframe designs with peers or instructors for critique and review, allowing for constructive feedback and improvement of design concepts.</p> | <ul style="list-style-type: none"> ·Recording your interactions ·Class Project - Wireframe feedback ·Columns or grids | 8 | 7 |

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| | | 3. Learners will explore the use of columns or grids in Adobe XD, understanding how to create and customize layout grids to establish consistent spacing, alignment, and structure within UI designs, enhancing visual hierarchy and readability. | | | |
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COURSES / MODULE TEMPLATE

NOS / Module: Employability Skill

NOS / Module Code: MSME/ES/01

THEORY HOURS: 30 PRACTICAL HOURS: -00 THEORY MARKS: 100

PRACTICAL MARKS: -

Refer Standard Curriculum developed by NCVET.

(https://nqr.gov.in/downloads/pdfs/30-hours_MC_Employability_Skills.pdf)