



NUST  
PAKISTAN NAVY  
ENGINEERING COLLEGE



# COMPUTER GRAPHIC-INKSCAPE MASTERY

## CLASS MODULES :

### MODULE 1: INTRODUCTION TO INKSCAPE

#### LESSON 1.1: OVERVIEW OF INKSCAPE

- INTRODUCTION TO VECTOR GRAPHICS AND INKSCAPE'S INTERFACE.
- UNDERSTANDING THE WORKSPACE AND BASIC NAVIGATION.

#### LESSON 1.2: ESSENTIAL TOOLS AND FEATURES

- EXPLORATION OF INKSCAPE'S TOOLBAR AND KEY TOOLS.
- CUSTOMIZATION OF THE WORKSPACE FOR EFFICIENT WORKFLOW.

### MODULE 2: WORKING WITH BASIC SHAPES AND OBJECTS

#### LESSON 2.1: CREATING AND EDITING SHAPES

- DRAWING BASIC SHAPES: RECTANGLES, ELLIPSES, POLYGONS, AND STARS.
- MODIFYING SHAPES USING NODES AND HANDLES.

#### LESSON 2.2: COMBINING AND MANIPULATING OBJECTS

- GROUPING AND UNGROUPING OBJECTS.
- USING PATH OPERATIONS: UNION, DIFFERENCE, INTERSECTION, AND EXCLUSION

### MODULE 3: MASTERING PATHS AND LINES

#### LESSON 3.1: UNDERSTANDING PATHS

- CONVERTING SHAPES TO PATHS FOR ADVANCED EDITING.
- UTILIZING THE NODE TOOL FOR PRECISE PATH ADJUSTMENTS.

#### LESSON 3.2: DRAWING AND EDITING LINES

- CREATING STRAIGHT AND CURVED LINES WITH THE PEN AND BEZIER TOOLS.

APPLYING PATH EFFECTS FOR STYLIZED LINE WORK

### MODULE 4: WORKING WITH TEXT

#### LESSON 4.1: ADDING AND FORMATTING TEXT

- INSERTING TEXT INTO DESIGNS.
- ADJUSTING FONT STYLES, SIZES, AND OTHER TEXT PROPERTIES.

#### LESSON 4.2: ADVANCED TEXT TECHNIQUES

- PLACING TEXT ON A PATH FOR CREATIVE LAYOUTS.
- CONVERTING TEXT TO PATHS FOR CUSTOM SHAPE EDITING.







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## CLASS MODULES :

### MODULE 5: APPLYING COLORS, GRADIENTS, AND PATTERNS

#### LESSON 5.1: COLOR MANAGEMENT

- USING THE FILL AND STROKE DIALOG FOR COLOR APPLICATION.
- EXPLORING COLOR PALETTES AND SWATCHES.

#### LESSON 5.2: CREATING GRADIENTS AND PATTERNS

- DESIGNING AND APPLYING LINEAR AND RADIAL GRADIENTS.

DEVELOPING CUSTOM PATTERNS FOR FILLS AND BACKGROUNDS.

### MODULE 6: IMPORTING AND EXPORTING DESIGNS

#### LESSON 6.1: EXPORTING PROJECTS

- SAVING DESIGNS IN VARIOUS FORMATS: SVG, PNG, PDF, AND EPS.
- ENSURING PROPER SETTINGS FOR WEB AND PRINT OUTPUTS.

#### LESSON 6.2: PREPARING GRAPHICS FOR PRESENTATIONS

- EXPORTING IMAGES OPTIMIZED FOR POWERPOINT AND GOOGLE SLIDES.
- MAINTAINING QUALITY AND TRANSPARENCY IN EXPORTED GRAPHICS

### MODULE 7: ADVANCED DESIGN TECHNIQUES

#### LESSON 7.1: VECTORIZING HAND-DRAWN ART

- CONVERTING SCANNED SKETCHES OR HANDWRITING INTO VECTOR ART.
- CLEANING AND REFINING TRACED ARTWORK FOR DIGITAL USE.

#### LESSON 7.2: CREATING LOGOS AND ICONS

- DESIGNING SIMPLE LETTER-BASED LOGOS.

DEVELOPING ABSTRACT LOGOS FROM IMAGES.

### MODULE 8: PRACTICAL PROJECTS AND APPLICATIONS

#### LESSON 8.1: DESIGNING A VECTOR ILLUSTRATION

- APPLYING LEARNED TECHNIQUES TO CREATE A COMPLETE ILLUSTRATION.
- INCORPORATING SHAPES, PATHS, TEXT, AND COLORS COHESIVELY.

#### LESSON 8.2: DEVELOPING A BRANDING PACKAGE

- CREATING A LOGO, BUSINESS CARD, AND LETTERHEAD.
- ENSURING CONSISTENCY ACROSS ALL BRANDING MATERIAL



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