

# COURSE : AutoCAD

AUTOCAD COURSE CONTENTS 10 MODULES

Autodesk, Inc.

 **AUTODESK**



**AUTODESK AutoCAD**

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11+ YRS GULF EXPERIENCE



**AL-HUSNA SMART SKILL  
PVT LTD**

# AUTOCAD COURSE CONTENTS - 10 MODULES

<b>MODULE 1</b>	<b>MODULE 2</b>	<b>MODULE 3</b>	<b>MODULE 4</b>	<b>MODULE 5</b>
10 SECTIONS	10 SECTIONS	10 SECTIONS	10 SECTIONS	10 SECTIONS
<b>MODULE 6</b>	<b>MODULE 7</b>	<b>MODULE 8</b>	<b>MODULE 9</b>	<b>MODULE 10</b>
10 SECTIONS	10 SECTIONS	10 SECTIONS	10 SECTIONS	10 SECTIONS

# MODULE I

SECTIONS	CONTENTS
SECTION 1	BASIC INTRO - ABOUT AUTOCAD, USAGE ADVANTAGES AND APPLICATIONS ETC
SECTION 2	SYSTEM REQUIREMENTS, SOFTWARE INSTALLATION, ORGANIZING WORKSPACE
SECTION 3	WELCOME SCREEN,-APPLICATION MENU, GUI, OPEN NEW DRAWING SAVE AND SAVE AS
SECTION 4	GRID, OSNAP, ORTHO,POLAR TRACK, OSNAP TRACKING,DYNAMIC INPUT AND SNAP MODE
SECTION 5	SELECTION METHODS,WCS, UCS ABOUT AXIS'S,VIEW CUBE AND NAVIGATION BAR.
SECTION 6	ADC,PALETTES, DRAWING SHEETS SIZES, MODEL, LAYOUT,VIEW PORTS
SECTION 7	FILE MENU,TAB RIBBON,TOOLS TAB,TEMPLATES & PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 8	SYSTEM COMMANDS, FUCTION KEYS, CONTROL KEYS AND ALT KEYS
SECTION 9	CUSTOMIZATION FROM STATUS BAR, OBJECT PROPERTIES AND ATTRIBUTES
SECTION 10	UNITS, DRAWING AREA, DRAFT SETTINGS CURSOR

# MODULE 2

SECTIONS	CONTENTS
SECTION 1	BASIC 2D DRAW COMMANDS, MODIFY COMMANDS HOW TO USE IT
SECTION 2	TYPES OF LINES AND STYLES, ARC TYPES CIRCLE, TYPES
SECTION 3	DRAW BASIC GEOMETRY SHAPES-S.BOX, RECTANGLE, POLYGONS, ELLIPSE AND DONUT
SECTION 4	ORTHOGRAPHIC PROJECTION AND TYPES(FAP AND TAP), COORDINATE SYSTEM AND TYPES
SECTION 5	ABSOLUTE COORDINATE SYSTEM (WITH EXAMPLE), RELATIVE RECTANGULAR COORDINATE SYSTEM (WITH EXAMPLE) AND RELATIVE POLAR COORDINATE SYSTEM (WITH EXAMPLE)
SECTION 6	ERASE, MOVE, COPY, ROTATE (MOCORO) AND MIRROR, PAN AND ZOOM
SECTION 7	LENGTHEN AND STRETCH AND SCALE AND PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 8	POINTS, BREAK, JOIN AND EXPLODE
SECTION 9	CHAMFER AND FILLET, OFFSET, TRIM AND EXTEND
SECTION 10	ARRAYS AND TYPES AND CONSTRUCTION LINE, RAY

# MODULE 3

SECTIONS	CONTENTS
SECTION 1	BASIC HATCHING AND GRADIENTS SPECIFYING HATCH AREAS
SECTION 2	HATCHING WITH PATTERNS AND HATCHING WITH GRADIENTS
SECTION 3	DEFINING BLOCKS, INSERTING BLOCKS, EDITING BLOCKS
SECTION 4	REDEFINING BLOCKS AND WORKING WITH GROUPS AND GLOBAL BLOCKS
SECTION 5	WORKING WITH BLOCKS AND XREFS AND PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 6	SEARCHING FOR CONTENT ACROSS MULTIPLE DRAWINGS STORING CONTENT ON TOOL PALETTES
SECTION 7	REFERENCING EXTERNAL DRAWING AND IMAGES
SECTION 8	CREATING AND EDITING TEXT, CREATING TEXT STYLES, SCALE AND SPELL
SECTION 9	WRITING LINES OF TEXT AND FORMATTING PARAGRAPHS OF TEXT USING
SECTION 10	CREATING MTEXT AND EDITING MTEXT WORKING WITH ANNOTATIONS

# MODULE 4

SECTIONS	CONTENTS
SECTION 1	CREATING LAYERS, ALTERING OBJECT'S LAYER VISIBILITY AND CONTROL LAYER VISIBILITY
SECTION 2	ASSOCIATE OBJECTS BY THEIR FUNCTION OR LOCATION
SECTION 3	APPLYING LINETYPE ASSIGNING PROPERTIES BY OBJECT OR BY LAYER
SECTION 4	MANAGING LAYER PROPERTIES AND ISOLATE OBJECTS AND PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 5	DEFINING ATTRIBUTES AND BLOCKS, INSERTING ATTRIBUTES BLOCKS (BATTMAN)
SECTION 6	CREATING TABLES AND EDITING TABLES STYLES
SECTION 7	USING FIELDS IN TABLE CELLS EDITING TABLE DATA
SECTION 8	MATCH PROPERTIES, BASIC PROPERTY SETTINGS AND PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 9	CONVERT TEXT TO MTEXT, BREAKLINE SYMBOL EXPLODE ATTRIBUTES TO TEXT
SECTION 10	MOVE/COPY/ROTATE, REPLACE BLOCK AND SUPER HATCH

# MODULE 5

SECTIONS	CONTENTS
SECTION 1	CREATING DIMENSIONING, STYLING (D) DIMENSIONS, ADDING DIMENSIONS, EDITING DIMENSIONS AND SETTINGS
SECTION 2	CONTENTBROWSER , DIMADD, DIMATTACH DIMEDITOVERRIDES DIMEXTLINESADD
SECTION 3	QDIM, DIMBREAK, LEAD, QLEADER, MLEADER, MLEADERSTYLES, ALIGN, COLLECT AND MLEDIT
SECTION 4	QUICK ACCESS TO LAYER SETTINGS & PROPERTY SETTINGS DEFINING LINETYPES AND LINEWEIGHT
SECTION 5	PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 6	ASK QUERIES AND CLARIFY YOUR DOUBTS WITH INDUSTRY EXPEERTS
SECTION 7	PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 8	ASK QUERIESAND CLARIFY YOUR DOUBTS WITH INDUSTRY EXPEERTS
SECTION 9	PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 10	ASK QUERIES AND CLARIFY YOUR DOUBTS WITH INDUSTRY EXPEERTS

# MODULE 6

SECTIONS	CONTENTS
SECTION 1	PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 2	ASK QUERIES AND CLARIFY YOUR DOUBTS WITH INDUSTRY EXPEERTS
SECTION 3	INSERTING BLOCKS WITH ATTRIBUTES, WHAT ARE ATTRIBUTES?
SECTION 4	HOW ATTRIBUTE VALUES ARE ENTERED ATTRIBUTE VISIBILITY
SECTION 5	EDITING ATTRIBUTE VALUES EDITING ATTRIBUTES ONE AT A TIME
SECTION 6	EDITING MULTIPLE ATTRIBUTE VALUES DEFINING ATTRIBUTES
SECTION 7	ATTRIBUTE DEFINITION ASSOCIATING ATTRIBUTES WITH BLOCKS
SECTION 8	REDEFINING BLOCKS WITH ATTRIBUTES UPDATING BLOCKS WITH NEW ATTRIBUTES
SECTION 9	EXTRACTING ATTRIBUTES AND PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 10	BLUE PRINTING - CREATING A PAGE SETUP OUTPUT TO PDF FILE.



# MODULE 7

SECTIONS	CONTENTS
SECTION 1	BASIC INTRODUCTION AUTOCAD 3D – APP.. MENU, GUI, WCS, UCS, RIBBON AND 3D CARTESIAN CORDINATES ETC.
SECTION 2	3D BASICS, 3D MODELLING (FOUR TYPES OF 3D MODELS WIREFRAME, SURFACE, MESH, AND SOLID MATERIALS, PROJECTING 3D MODEL TO LAYOUT
SECTION 3	CREATE 3D GEOMETRY SURFACES AND SOLIDS - BOX, WEDGE, CYLINDER, CONE, PYRAMID, SPHERE, TORI (TORUS) AND POLYSOLID ETC.
SECTION 4	CREATE COMPLEX 3D GEOMETRY USING WITH FOUR PRIMARY COMMANDS (EXTRUDE), (REVOLVE), (SWEEP) AND (LOFT)
SECTION 5	BOOLEAN OPERATIONS UNION, SUBTRACT AND INTERSECT
SECTION 6	3D POLYLINE, SHELL (RECT. AND CIRCULAR), HELIX PRESSPULL, ORBIT, FREE ORBIT AND CONTINUOUS ORBIT
SECTION 7	ALIGN 3D OBJECTS MOVE, COPY, ROTATE, SCALE, SLICE, MIRROR AND ARRAY OBJECTS IN 3D
SECTION 8	SEPARATE, SPLIT AND SMOOTH OBJECTS, MOVING UCS ORIGIN AND MOVING UCS TO A FACE
SECTION 9	PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 10	ASK QUERIES AND CLARIFY YOUR DOUBTS WITH INDUSTRY EXPERTS

# MODULE 8

SECTIONS	CONTENTS
SECTION 1	CREATE SOLID BLOCKS, EDIT PROPERTIES AND MODIFY SIZE, SHAPE, THICKNESS AND COLOR ETC.
SECTION 2	CHANGE WORK PLANE DYNAMIC UCS, XY PLANE, YZ PLANE AND ZX PLANE AND ISOMETRIC VIEW ETC.
SECTION 3	FILLETS AND CHAMFRS ON 3D SOLIDS AND ADDING PROJECTED VIEWS (4 ORTHOGRAPHIC AND 4 ISOMETRIC)
SECTION 4	CONVERT 2D OBJECTS TO SURFACES, CONVERT SOLIDS TO SURFACES AND CONVERT SURFACES TO SOLIDS
SECTION 5	CREATE SECTION PLANE, SECTION BOUNDARY AND SECTION VOLUME ETC.
SECTION 6	CREATING MULTIPLE VIEWPORTS, CREATE TECHNICAL DRAWING FLATSHOT, 3D NAVIGATION ETC.
SECTION 7	CREATE ANIMATING AND SHOW MOTION SHOTS, WALK, FLY, CAMERA IN AUTOCAD 3D
SECTION 8	3D MODEL IMPORTS AND AUTOMATIC MODEL DOCUMENTATION
SECTION 9	PRACTICE TIME –WHAT YOU LEARN DO PRACTICE.
SECTION 10	ASK QUERIES AND CLARIFY YOUR DOUBTS WITH INDUSTRY EXPERTS

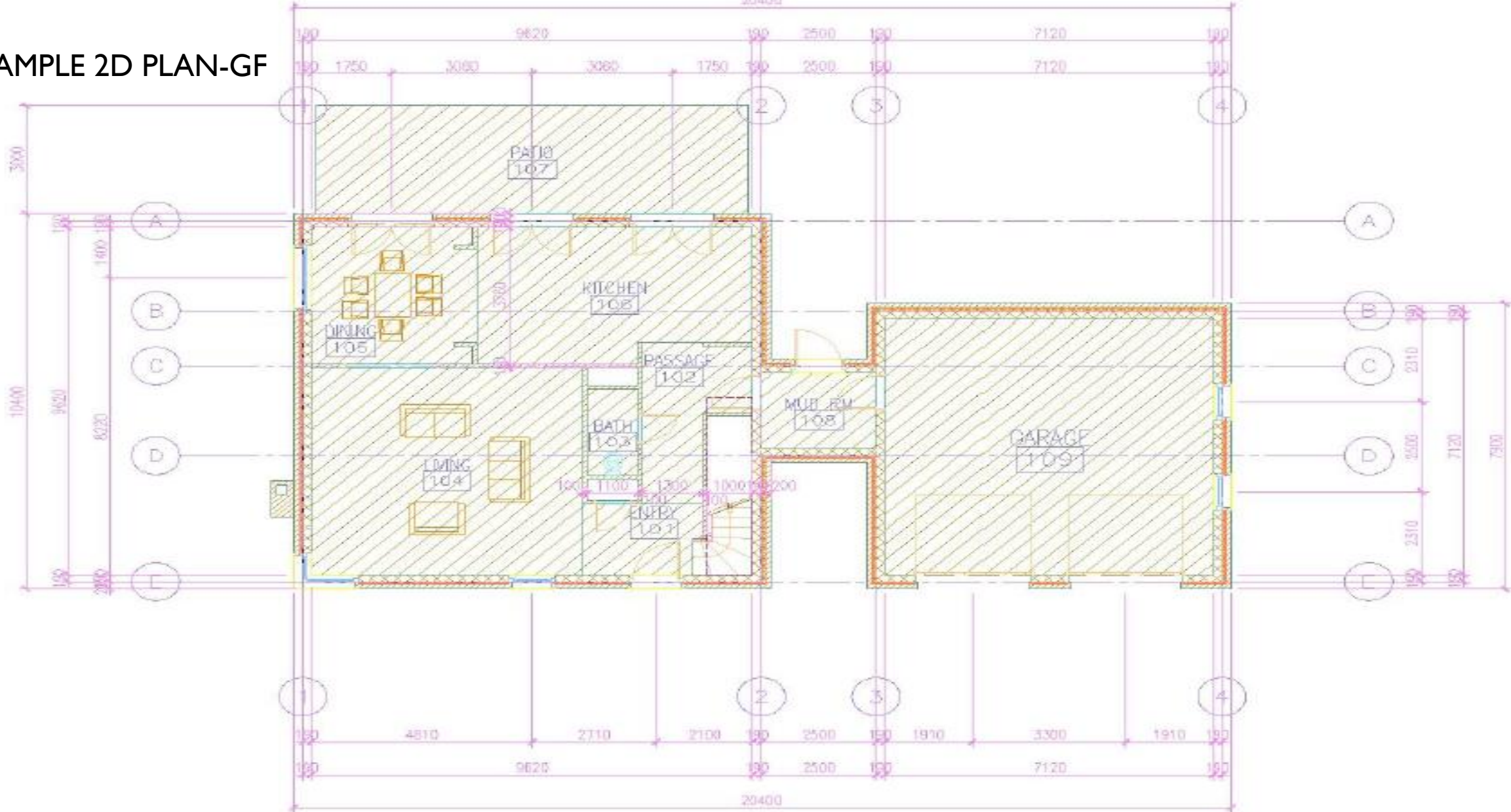
# MODULE 9

SECTIONS	CONTENTS
SECTION 1	<b>DESIGN A PROJECT- 4BHK LUXURY VILLA (2D PLAN, ELEVATION AND SECTIONS AND DETAILS)</b>
SECTION 2	SET UNITS, DRAWING AREA / SPACE, CREATE A BOUNDARY FOR REFERENCE, SET GRIDS AS PER AREA OF PROJECT
SECTION 3	CREATE O/S WALLS, I/S WALLS , STAIR , ELEVATORS CORE WALLS AND PARTITIONS KIDSPLAYZONE, GARDEN AND PARKING ETC.
SECTION 4	CREATE DOORS(DIFF.TYPES) WINDOWS(DIFF.TYPES) VENTILATORS, FLOORING FALSE CEILING (RCP) DETAILS ETC.
SECTION 5	ADD FURNITURE AND HOME APPLIANCES, ALL BEDROOMS BEDS, KITCHEN COOK AREA AND CABINETS
SECTION 6	INSERT BATHROOMS AND WASHROOMS PLUMBING FIXTURES , WATER HEATERS AND ACCESSORIES ETC
SECTION 7	ANNOTATION FOR ROOMS ASSIGN NAME AS PER USAGE AND DIMENSIONING ALL ROOMS AND OBJECTS
SECTION 8	HATCHING FOR WALLS AND FLOORING ACCORDING TO SPACE LOCATION( SOLID HATCH OR GRADIENT HATCH)
SECTION 9	CREATE FRONT ELEVATIONS, STAIRCASE AND (LIFTS)ELEVATORS SECTIONS AND SECTIONS IN BOTH X AND Y AXIS
SECTION 10	CREATE BASIC STRUCTURAL DESIGN PLAN AND ELEVATIONS AND SECTION DETAILS (LIKE FOUNDATION(C-BEDS, FOOTINGS PLINTH BEAM) GL BACKFILLING SUBSTRUCTURE, SUPER STRUCTURE AND LINTEL BEAMS COLUMNS AND UNDER SLAB BEAMS )AND SLABS/ROOF ETC.

# MODULE 10

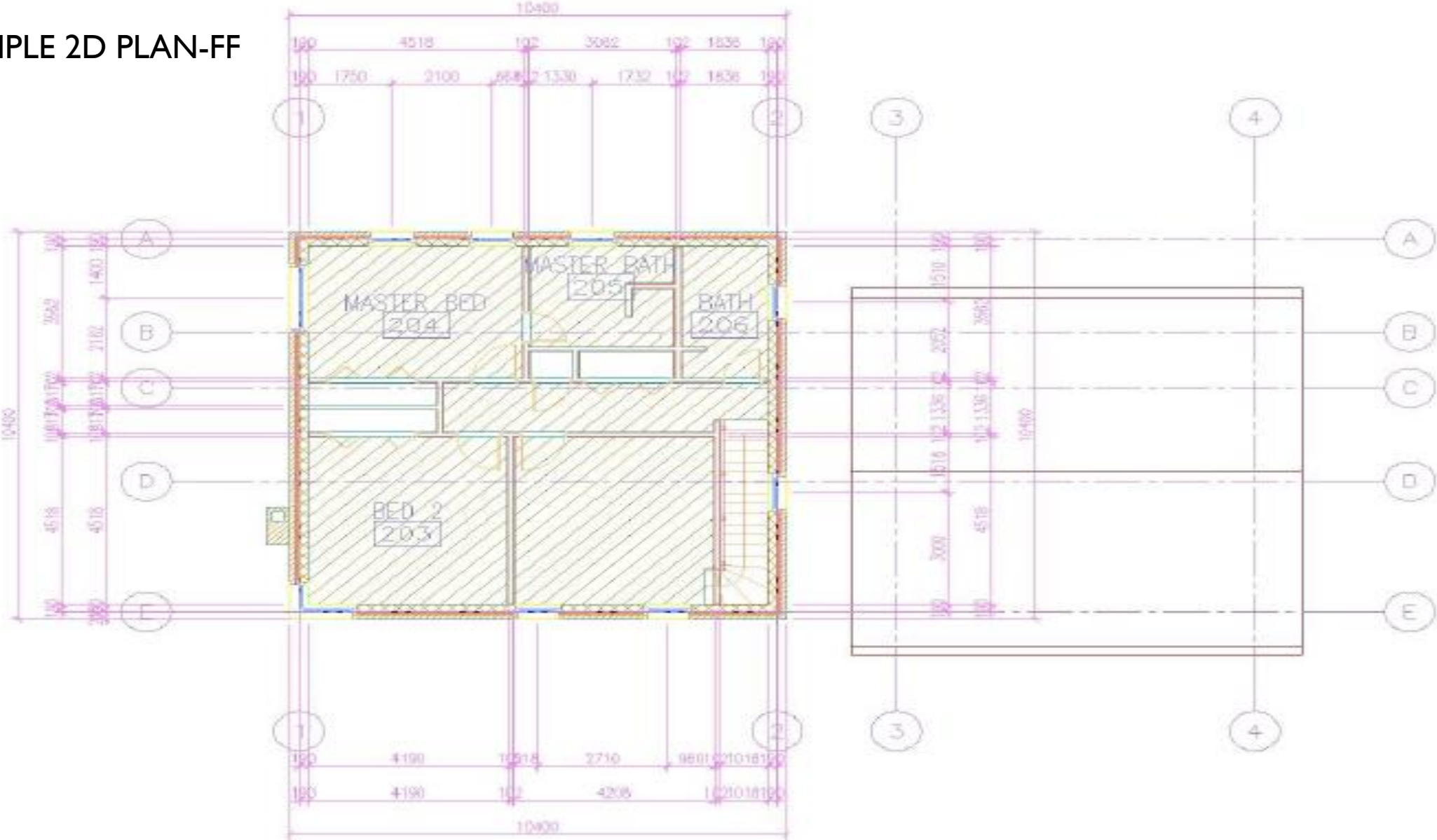
SECTIONS	CONTENTS
SECTION 1	PROVIDE / INSERT ALL MEP BASIC REQUIREMENTS (SUCH AS POWER, LIGHTING, ELECT ROOMS PANELS MCC, MDB, DB CABLE TRAYS AND CONDUITS ETC. HVAC EQUIPMENTS ROOMS AND AIR DISTRIBUTION SYSTEM, FIRE FIGHTING- (SPRINKLERS, FIRE EXTINGUISHERS, FHC, LV,, HYDRANTS) FIRE ALARM, PA, CCTV SYSTEMS, DRAINAGE SYSTEM AND WATER SUPPLY PIPNG AND ALL NECESSARY PUMPING SYSTEM ETC.
SECTION 2	SURFACES((EXTERNAL OUTER LAYER PROTECTION-PROTECT STRUCTURE FROM WEATHERING) FINISHES(PLASTER AND PAINTS) TO MAKE THEM AESTHETICALLY BEAUTIFUL, DURABILITY AND PLEASING APPEARANCE)
SECTION 3	CREATE LAYERS TABLE (LIST) AND LEGENDS, GENERAL NOTES, PREPARED BY, CHECK BY, REVIEW BY, APPROVED BY PROJ. DATE, CONTRACTOR NAME, ARCHITECT, CONSULTANT NAME ETC.
SECTION 4	CREATE LAYOUT, FPROJECT TITLE, CLIENT NAME, DWG SCALE, UOM, PROJECTION NAME AND SYMBOL
SECTION 5	EXPORTING DWF OR PDF FILES, AUTODESK DESIGN REVIEW
SECTION 6	VIEWING MARKUPS IN AUTOCAD, PUBLISHING DRAWING SETS
SECTION 7	OUTPUT FOR ELECTRONIC REVIEW, PLOTTING ELECTRONIC FILES
SECTION 8	PRINTING AND PLOTTING CREATING PLOT STYLE TABLES
SECTION 9	PLOTTING IN MODEL SPACE PLOTTING IN LAYOUTS IN PAPER/SHEETS SPACE
SECTION 10	EXPORTING TO AN ELECTRONIC FORMAT (EMAIL) SHARE BY LAN, FORWARD BY DRIVE ETC.

# SAMPLE 2D PLAN-GF



**LET'S GET STARTED**

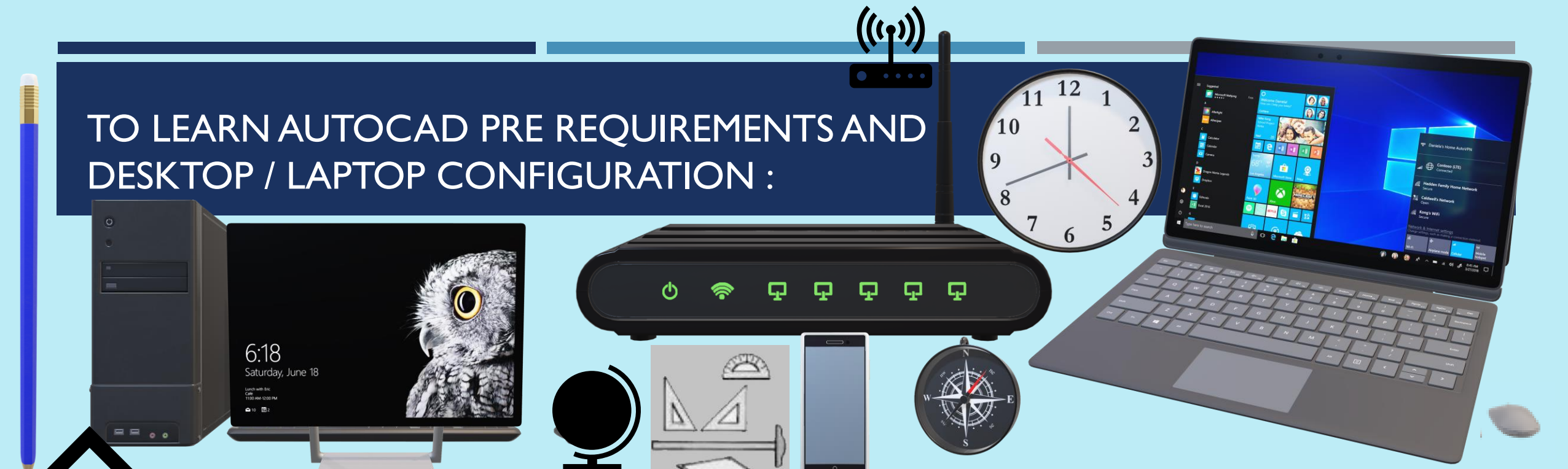
# SAMPLE 2D PLAN-FF



LET'S GET STARTED



# TO LEARN AUTOCAD PRE REQUIREMENTS AND DESKTOP / LAPTOP CONFIGURATION :



## System requirements for AutoCAD 2024 including Specialized Toolsets (Windows)

**Operating System** 64-bit Microsoft® Windows® 11 and Windows 10 version 1809 or above. See Autodesk's [Product Support Lifecycle](#) for support information.

**Processor** **Basic:** 2.5–2.9 GHz processor (base) ARM Processors are not supported.  
**Recommended:** 3+ GHz processor (base), 4+ GHz (turbo)

**Memory** **Basic:** 8 GB  
**Recommended:** 32 GB

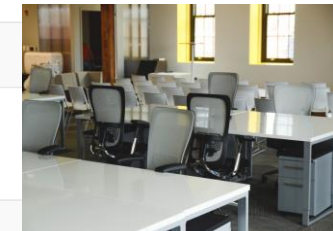
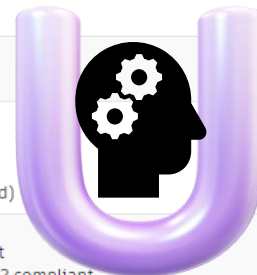
**Display Resolution** **Conventional Displays:** 1920 x 1080 with True Color  
**High Resolution & 4K Displays:** Resolutions up to 3840 x 2160 (with "Recommended" display card)

**Display Card** **Basic:** 2 GB GPU with 29 GB/s Bandwidth and DirectX 11 compliant  
**Recommended:** 8 GB GPU with 106 GB/s Bandwidth and DirectX 12 compliant

DirectX 12 with Feature Level 12\_0 is required for Shaded(Fast) and Shaded with edges(Fast) visual styles. Please be sure to use the latest video card manufacturer drivers from their website.

**Note:** AutoCAD uses your computer's display card for a variety of essential graphics operations including but not limited to view manipulation, line smoothing, and text/linetype generation. It is recommended that you have a display card with dedicated VRAM to support these operations at optimal speeds.

**Disk Space** 10.0 GB (suggested SSD)



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- COURSE COST : 10,000/- INR (INDIA) & 500 SAR (KSA)



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**THANK YOU..!**

**LET'S GET STARTED  
WELCOME AND HAPPY LEARNING.**