

3ds Max Notes

1. Starting 3ds Max file

Open 3ds Max

If 'Welcome to 3ds Max' menu appears then select *New Empty Scene*

Or select *Reset* button under the application button (3ds Max symbol top left of screen)

2. Setting up 3ds Max file

Customize menu > *Units Setup*

Display Unit Scale > *Generic Units*

System Unit Setup > System Unit Scale > *Metres*

3. Setting up renderer

Rendering menu > *Render Setup*

Scroll down to *Assign Renderer*

Production > *NVIDIA mental ray*

Close menu

4. Importing Autocad dwg file

Import button under the application button (3ds Max symbol top left of screen)

Navigate to dwg file location, select and *Open*

Autocad DWG/DXF Import Options dialogue box now appears

Under *Geometry* Tab:

Derive Autocad Materials by > *Layer, Blocks as Node Hierarchy, Split by Material*

Curve steps > *30*

Maximum surface deviation for 3D Solids > *0.005*

Under *Layers* Tab:

Select from list > *Select relevant layers*

Select *OK*

5. Setting up Daylight System

Create tab on Command Panel (Right hand side of screen) > Pick *Systems* button (2 stars symbol)> *Daylight*

You are creating a daylight system > *Yes*

Click and drag compass on screen

Drag then click sunlight into position (right click to deselect command after)

To alter time / date select daylight symbol on screen (or by using *Select by Name* button on main toolbar) and select the *Modify* tab on the Command Panel then select *Setup* button

6. Material Editing

Material Editor button on Main Toolbar at top of screen (If *Slate Material Editor* button appears then hold down button and choose *Material Editor*)

Change name of material from 01-default to appropriate name

Pick *Standard* button and scroll down to *Autodesk Material library*

Select appropriate material and *OK*

7. Assigning Materials

Either:

Drag and drop material onto relevant geometry *or*

Select geometry on screen (or by using *Select by Name* button) and pick *Assign Material to Selection* button within the Material Editor

8. Scaling Materials

Select object

Modify tab on Command Panel

Pick small arrow on right

Select *UVW Map* from list

Select relevant *Mapping* option (eg box)

Edit *Length / Width / Height* settings

9. Creating Cameras

Create tab on Command Panel > Pick Cameras button > *Target*

Click position of camera on screen and drag to target position

Change a viewport to show what the camera sees by selecting the viewport name on the viewport (eg Front) and selecting relevant camera name

Also select *Show Safe Frame*

10. Moving Cameras

Select camera and pick *Select and Move* button on Main Toolbar

Move around on screen

To change height of camera edit the Z value on status bar at bottom screen

Also change camera target in same way

11. Setting up Rendering environment

Rendering menu > *Environment*

Change the background colour

12. To render image

Make sure correct camera viewport active (right click in viewport)

Select *Render Production* button (right hand teapot) on Main Toolbar

Save Image button

Type relevant name and save as relevant format (eg TGA)

13. Changing render size

Rendering menu > *Render setup*

Change *Output Size* width and height

Re-render image to new dimensions

14. Creating Animation Camera Path

Create Tab on Command Panel > *Shapes* button > *Line*

Under Creation Method > Initial Type > *Smooth*

Draw line on screen (Right click to complete)

15. Creating Animation Camera (Free)

Animation menu > *Walkthrough assistant*

Select *Free*

Create New Camera button

Path Control > Pick Path > *Select relevant line*

Select *Move Path to Eye Level* (1.6m)

Set Viewport to Camera

16. Creating Animation Camera (Target)

Animation menu > *Walkthrough assistant*

Select *Targeted*

Create New Camera button

Path Control > Pick Path > *Select relevant line on screen*

Select *Move Path to Eye Level* (1.6m)

Set Viewport to Camera

17. Previewing animated camera

Play Animation button on Time Controls bar

18. Animation time settings

Time Configuration button on Time Controls bar (bottom right of screen)

Frame rate > *Custom*

FPS: > 15

Animation > *Re-scale time* button

Set relevant length (ie total amount of frames) > *OK*

Eg 30 seconds at 15fps = 450 frames length

(Track Bar at bottom of screen will update to show revised time length)

19. Setting camera target to follow path

Create Tab on Command Panel > Shapes button > Line

Under Creation Method > Initial Type > *Smooth*

(If required move path up using *Select and Move* on main toolbar)

Select Camera target

Motion tab on Command Panel

Expand *Assign Controller* button

Select *Position:Position XYZ* from list

Select *Assign Controller* button

Select *Path Constraint > OK*

Path Parameters > *Add Path* button > *Select relevant line on screen*

Right click to complete command

20. Editing Camera / Target paths

Select relevant line on screen

Modify tab on Command Panel

Under Selection select *Vertex* (button with dots)

Select relevant vertex on line and move using *Select and Move* on main toolbar

Move vertex by moving on screen or editing numerical value (X, Y or Z) on status bar at bottom screen

Select *Vertex* button again to deselect

21. Rendering Animation

Rendering menu > Render setup

Time Output > *Active Time Segment*

Output Size > *640 x 480*

Scroll down to Render Output > *Files*

Type relevant file name and select type ie *AVI (DV Video Encoder)*

Render

22. Rendering a still from Animation path

Use Time Slider to move viewport to relevant still (Make sure camera viewport active)

Rendering menu > Render setup

Time Output > *Single*

Output Size > *Type in required size of rendered image*

Scroll down to Render Output > *Files*

Type relevant file name and select type ie *TGA*

Render