Autodesk Maya Certified User Skills



Image courtesy of Autodesk Gallery



Introduction

Welcome to the *Autodesk® Maya® Certified User Skills*. This document was designed to help educators and educational institutions teach Maya[®] software skills. Created using valuable input from respected educators and designers, it sets forth important skill standards for developing a high-quality curriculum resources.

The Maya Certified User Skills serves to standardize the core competencies for fundamental-level instruction with Maya for a two-semester class.



P: Although this document is designed to facilitate teacher-led courses and lessons, it may also be referenced for self-paced learning through the use of the Autodesk[®] Digital STEAM Workshop and the Autodesk[®] Maya[®] Certified User Digital Study Packet.

Using This Document

This easy-to-read document lists industry-specific topics pertaining to a function or feature set of Maya software. Topics are organized into three substructures logically sequenced for classroom presentation:

- **Topic**: A standard functional subject area and/or feature set available in Maya software. Example: Drawing Organization and Inquiry Commands.
- **Subtopic**: A subtopic provides more detail on the topics and what should be taught and learned. Example: Layers Properties Manager.
- **Learning Objective**: The learning objective exemplifies what the student is expected to understand. Example: Use layers to organize objects in your drawings.



Introduction

Maya Certified User Digital Study Packet

The Maya Certified User Digital Study Packet is a digital learning resource that provides students with a library of short videos based on the Maya Certified User Skills. The study packet covers the basic techniques required to become familiar with the software and get hands-on quickly.



Teachers can leverage the study packets in conjunction with the Autodesk Digital STEAM Workshop or their own curriculum to help their students build their software skills.

Autodesk Digital STEAM Workshop

The Autodesk Digital STEAM Workshop provides teachers and students with a highly visual story-based curriculum created to promote design innovation and creative problem-solving through science, technology, engineering, arts, and math (STEAM). The curriculum is structured as a framework for learning software through project-based content based on engaging real-world industry projects that build gradually in difficulty, offering students a chance to achieve small successes as they build their technical skills.



P: Using the Maya Certified User Skills as benchmarks, teachers can measure a student's progress as they work through the skills-building projects offered in the Autodesk Digital STEAM Workshop.

Feedback

We welcome your feedback on the Maya Certified User Skills. Please email us at digitalsteam@autodesk.com.

Autodesk Maya Certified User Skills



Image courtesy of Firaxis Games

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference				
UI/Scene Manage	ment	•		•				
	UI Elements	UI Elements						
		Menus	Point out common menus like File, Edit, Modify, Create, Display, Window, Assets, Muscle(if it's loaded) and Help. Talk how everything between File and Muscle or Help (if Muscle is not loaded) changes depending on the different Menu Sets you choose	http://download.autodesk.com/ us/maya/2011help/index.html				
		Status Line	Point the most important buttons on the Status Line like the Creat New, Open Scene and Save Scene button, the object mode button, the construction history button, render current frame button and the attribute editor, tool settings and channel box button.	http://download.autodesk.com/ us/maya/2011help/index.html				
		Attribute Editor	Give a brief overview of the attribute editor, and explain how it differs from the channel box.	http://download.autodesk.com/ us/maya/2011help/index.html				
		Tool Settings	Demonstrate how the Tool Settings window is context sensitive.	http://download.autodesk.com/ us/maya/2011help/index.html				
		Channel Box	Give a brief overview of what information the channel box can hold and it's importance in quickly accessing attributes	http://download.autodesk.com/ us/maya/2011help/index.html				
		Tool Box	Demonstrate how to access transformation tools from the toolbox as well as the last used tool	http://download.autodesk.com/ us/maya/2011help/index.html				
	UI Navigatio	on						
		Menu Sets	Demonstrate the ability of changing between menu sets and discuss how each menu relates to a particular task	http://download.autodesk.com/ us/maya/2011help/index.html				
		Marking Menus	Demonstrate how to access context sensitive tools using the right mouse button.Show how you can hide/ unhide UI elements with the spacebar(hotbox) and RMB of the West Quadrant	Watch video 3_hotbox				
		Function Keys	Demonstrate how to change between different menu sets using the function keys for e.g. F2, F3 etc	Watch video 1_Menus				

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Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
UI/Scene Manage	ment						
	View Navigation						
		Alt + LMB, MMB, RMB	Demonstrate how to move the camera or viewing area using the keyboard and mouse combinations	http://download.autodesk.com/ us/maya/2011help/index.html			
		Hotbox	Demonstrate how to navigate through the hotbox	Watch video 3_hotbox			
		Perspective/ Orthographic Views	Discuss the importance of using both perspective and orthographic view when viewing and managing objects in a scene	Watch video 4_view navigation			
		Quick Layout Buttons	Show how the quick layout buttons can be used to change layouts in Maya	Watch video 5_Quick Layout			
		View Cube	Demonstrate how the view cube can be used to navigate to different views in Maya	http://download.autodesk. com/us/maya/2011help/ index.html			
		Grid	Demonstrate how to turn the grid on and off and change spacing. Discuss the importance of setting working units correctly.	Watch video 11_project folder			
	Viewport Dis	splay Types	^				
		Shading>Wireframe	Demonstrate using the hotkey 4 with an example. Create a simple Maya scene with different display modes and have students identify these modes within the scene mainly the wireframe, smooth shade all, wireframe on shaded, textured and use all lights	Review Shading Modes Video			
		Shading>Wireframe on Shaded		Review Shading Modes Video			
		Shading>Smooth Shade All	Demonstrate using the hotkey 5 with an example	Review Shading Modes Video			
		Shading> Hardware Texturing	Demonstrate using the hotkey 6 with an example	Watch video 28_file texture			
		Use All Lights	Demonstrate using the hotkey 7 with an example	Watch video 25_Lights_IPR			

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
UI/Scene Manage	ment	•					
	ToolBox						
		Select Tool	Demonstrate how to activate the select tool and also discuss the Q Hotkey	Watch video 7_Toolbox			
		Move Tool	Demonstrate how to activate the move tool and also discuss the W Hotkey	Watch video 7_Toolbox			
		Rotate Tool	Demonstrate how to activate the move tool and also discuss the E Hotkey	Watch video 7_Toolbox			
		Scale Tool	Demonstrate how to activate the move tool and also discuss the R Hotkey	Watch video 7_Toolbox			
	Object Selec	tion		·			
		Frame on Selected	Demonstrate how to center the camera on the selected object/s using the F hotkey	Watch video 8_Selections			
		Deselect	Demonstrate how to deselect objects or components using the keyboard and mouse combination Ctrl + Select	Watch video 8_Selections			
		Add to Selection	Demonstrate how to add to a selectin of objects or components using the keyboard and mouse combination Ctrl + Shift + Select	Watch video 9_lasso paintselections			
		Quick Select Sets	Demonstrate the workflow for creating quick selects sets and how to manage sets after creation	Watch video 30_UV Texture Editor			
		Lasso Tool	Demonstrate how to use the lasso tool to select objects or components	Watch video 9_lasso paintselections			
		Paint Selection Tool	Demonstrate how to use the paint selection tool.	Watch video 9_lasso paintselections			
		Selection Order	Demonstrate how one can tell which object was selected last by observing the wireframe color of selected objects	Watch video 8_Selections			
		Selection Masks	Demonstrate how to filter what can be selected in a scene using the selection masks	Watch video 8_Selections			

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference				
UI/Scene Manage	ement							
	Object Trans	Object Transformation						
		Local/Object/World Space	Give a brief overview of the different spaces an object can exist in, giving examples of how each space affects the object	http://download.autodesk.com/ us/maya/2011help/index.html				
		Pivot	Give examples of how the pivot of an object can effect it's transformations and how to modify the pivot	Watch video 2_tool settings wmv				
		Restricting the Transform Manipulator to two axis	Demonstrate with an example how the transform manipulator can be restricted to two axis while diabling one	Watch video 7_Toolbox				
	Object Orga	nization						
		Outliner	Introduce how the outliner can be used to view and organise objects in a scene	http://download.autodesk.com/ us/maya/2011help/index.html				
		Hypergraph:Hierarchy	Introduce the hypergraph as a more technical approach to viewing and organizing objects in a scene but with a deeper level of control.	http://download.autodesk.com/ us/maya/2011help/index.html				
	Customizing	3 3						
		Shelves		http://download.autodesk.com/ us/maya/2011help/index.html				
		Layer Editor	Demonstrate how to manage the visibility and selection of objects by using the layer editor	Watch video 10_outliner hypergraph				
	Project Fold	er						
		Overview	Demonstrate and discuss how this can organize files for a project	http://download.autodesk.com/ us/maya/2011help/index.html				
	Preferences	: Undo						
		Queue	Discuss why the undo queue is initially set to 50 and	http://download.autodesk.com/				

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
Modeling							
	Scene Setup/Layout						
		Units	Show the Working Units Setup in Maya	Watch video 11_projectfolder			
	2D Nurbs Cu	urve Tools					
		Nurbs Curve Components	Discuss the different components of Nurbs curves	http://download.autodesk.com/ us/maya/2011help/index.html			
		EP and CV Curve Tools	Demonstrate that each tool differs in its creation process but that both create a NURBS curve	http://download.autodesk.com/ us/maya/2011help/index.html			
		Beizer Curve Tool	Compare bezier curves to NURBS curves highlighting their differences and discussing how they can be used together	http://download.autodesk.com/ us/maya/2011help/index.html			
	Creation To	ols					
		Create Circle	Demonstrate the input node for the circle	Watch video 13_Bend			
		Create Text	Demonstrate text while using Bevel and Bevel plus	Watch video 15_Text_Bevel_ Bevel Plus			
	NURBS Curv	ve Component Editing		•			
		RMB Marking Menu	Demonstrate the ability to choose different component modes using the RMB marking menu	http://download.autodesk.com/ us/maya/2011help/index.html			
		Open/Close Curves	Demonstrate how you can open and close curves with the open/close curves tool and how it affects surface creation	Watch video 14_Extrude_beizer			
		Snap to Curve	Demonstrate using this on the status line and also introduce the C hotkey	Watch video 12_revolve			
		Snap to Grid	Demonstrate using this on the status line and also introduce the X hotkey	Watch video 13_Bend			

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference				
Modeling								
	Nurbs Surfa	Nurbs Surface Display						
		Crv Precision Shaded>Low Resolution Display	Demonstrate in the Attribute Editor and then introduce the hotkey 1	Watch video 12_revolve				
		Crv Precision Shaded>Medium Quality Display	Demonstrate in the Attribute Editor and then introducethe hotkey 2	Watch video 12_revolve				
		Crv Precision Shaded>Smooth Quality Display	Demonstrate in the Attribute Editor and then introduce the hotkey 3	Watch video 12_revolve				
	NURBS Surface Creation							
		Revolve	Create a simple wine glass model while using revolve. Explain the difference between the CV, EP and Beizer curve tools. Explain the importance of pivot points. Show how to snap pivot points. Also make use of image planes. Explain the Revolve tool options in detail and show how you can get different output geometry while using the tool.	Watch video 12_revolve				
		Loft	Create a simple toothpaste tube while using loft. Start with nurbs circles. Talk about the input node for circle. Discuss inserting isoparms for greater details after the loft creation and show how the shape can be edited through different component levels. Explain the Loft tool options in detail and show how you can get different output geometry while using the tool.	Watch video 13_Bend				
		Extrude	Create a simple tunnel or a rollercoaster while using the extrude. Talk about snapping pivots. Show how to modify the path while editing the nurbs components. Explain the Extrude tool options in detail and show how you can get different output geometry while using the tool.	Watch video 14_Extrude_beizer				

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference
Modeling			-	
	NURBS Surf	ace Creation		
		Bevel	Create a simple logo such as the "Maya" logo while using either CV, EP or Beizer curve tools. Use image planes as modeling aids. Discuss different curve editing tools and use the bevel tool to create the logo. Discuss the Bevel tool options in detail and show how you can get different output geometry while using the tool.	Watch 15_Text_Bevel_Bevel Plus
		Bevel Plus	Create a simple logo such as the "Maya" logo while using either CV, EP or Beizer curve tools. Use image planes as modeling aids. Discuss different curve editing tools and use the bevel plus tool to create the logo. Discuss the Bevel Plus tool options in detail and show how you can get different output geometry while using the tool.Discuss difference between the bevel and bevel plus tool.	Watch 15_Text_Bevel_Bevel Plus
	Object Clon	ing		·
		Duplicate	Demonstrate creating multiple copies of an object. Introduce the hotkey.	Watch video 13_Bend
		Duplicate Special	Demonstrate the added control in creating multiple copies using duplicate special	Watch video 16 _Polygon_ Duplicate
		Duplicate with Transform	Demonstrate the workflow needed to correctly use duplicate with transform. Introduce the hotkey.	Watch video 16 _Polygon_ Duplicate
	Polygon Too	ls		
		Polygon Surface Components	Explain the different components of Polygon surfaces	Watch video 16 _Polygon_ Duplicate
		Polygon Primitives	Demonstrate different Polygon primitives and discuss their input node setiings	Watch video 16 _Polygon_ Duplicate
	Component	Editing		
		RMB Marking Menu	Demonstrate the ability to choose different component modes using the RMB marking menu	Watch video 16 _Polygon_ Duplicate
	Modeling To	ools	·	·
		Interactive Creation	Demonstrate how to create a primitive using interactive creation turned on	Watch video 16 _Polygon_ Duplicate

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
Modeling		-		•			
	Polygon Modeling Tools						
		Combine	Demonstrate that combining multiple polygon objects creates a polygon object with a single transform	Watch video 17_Extrude_Wedge Face			
		Smooth	Demonstrate the ability to add detail to a mesh using smooth and compare this to using smooth mesh preview	Watch video 17_Extrude_Wedge Face			
		Booleans	Demonstrate different boolean types	Watch video 18_Boolean_ Polycount			
	Polygon Info	ormation					
		Poly Count	Demonstrate how to keep track of poly counts at a scene, object selection level	Watch video 18_Boolean_ Polycount			
	Polygon Sur	face Editing					
		Extrude	Demonstrate how to add and reshape geometry using the extrude tool. Introduce the "g" hotkey	Watch video 17_Extrude_Wedge Face			
		Bridge	Demonstrate how to add geometry using the bridge tool	Watch video 17_Extrude_Wedge Face			
		Insert Edge Loop Tool	Demonstrate adding edge loops and redirecting the flow of geometry using Insert Edge loop tool	Watch video 17_Extrude_Wedge Face			
		Wedge Face	Demonstrate how wedge face can be used to add geometry at certain angles	Watch video 17_Extrude_Wedge Face			
		Merge	Demonstrate how merge can be used to connect vertices and edges	Watch video 19_Merging			
		Merge To Center		Watch video 19_Merging			
		Merge Vertex Tool	Demonstrate how the merge vertex tool can be used to merge vertices by click dragging	Watch video 19_Merging			
		Merge Edge Tool	Demonstrate how edges can be merged with the merge edge tool	Watch video 19_Merging			
		Bevel	Demonstrate how to bevel edges	Watch video 16 _Polygon_ Duplicate			

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Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
Modeling							
	Smooth Mesh in the Attribute editor for Polygons						
		Snooth Mesh Preview>Default Polygon Mesh	Demonstrate in the Attribute Editor and then introduce the Hotkey 1	Watch video 16 _Polygon_ Duplicate			
		Smooth Mesh Preview>Cage + Smooth Mesh Display	Demonstrate in the Attribute Editor and then introduce the Hotkey 2	Watch video 16 _Polygon_ Duplicate			
		Smooth Mesh Preview>Smooth Mesh Display	Demonstrate in the Attribute Editor and then introduce the Hotkey 3	Watch video 16 _Polygon_ Duplicate			
	Polygon Cor	nponents					
		Toggle Object/ Component Mode, RMB	Introduce the Hotkey F8	Watch video 16 _Polygon_ Duplicate			
		Vertex Component Mode	Introduce the Hotkey F9	Watch video 16 _Polygon_ Duplicate			
		Edge Component Mode	Introduce the Hotkey F10	Watch video 16 _Polygon_ Duplicate			
		Face Component Mode	Introduce the Hotkey F11	Watch video 16 _Polygon_ Duplicate			
	Modeling Ai	ds	·	· · · · · · · · · · · · · · · · · · ·			
		Image Planes	Demonstrate how to setup image plane to assist as reference in modeling objects	Watch video 12_revolve			
		Non-Linear Deformers	Demonstrate the bend and twist deformer	Watch video 12_revolve & video 13_Bend			

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
Modeling		-	•	•			
	Subdivision	ubdivision Surfaces					
		Standard Mode vs. Polygon Proxy Mode	Demonstrate how to use each mode when modifying a subd surface and show when to use each mode	Watch video 20_Subd Poly			
		Partial Crease Edge/ Vertex		Watch video 20_Subd Poly			
Camera							
	Camera Typ	es					
		Camera	Demonstrate the difference between the types of Cameras available	Watch video 21_Cameras			
	Creating Ca	meras from Views	^				
		Panels>Perspective>New	Demonstrate how new cameras can be made easily from the panel dropdown	Watch video 21_Cameras			
	Camera Attı	ributes	•	•			
		Near/Far Clip Planes	Demonstrate how the Near/Far Clip Planes control what is rendered in Camera	Watch video 23_clipping pla tumble track dolly			
		Background Color	Demonstrate how to change the Background Color and then return to Default	Watch video 35_Render set			
	Camera Set	tings	^ 				
		Safe Title/Safe Action	Discuss the use of Safe Title/Safe Action	Watch video 22_Safe Frame			
		Tumble Tool	Review the hotkeys	Watch video 23_clipping pla tumble track dolly			
		Track Tool	Review the hotkeys	Watch video 23_clipping platumble track dolly			
		Dolly Tool	Review the hotkeys	Watch video 23_clipping pla tumble track dolly			
		Zoom Tool		Watch video 23_clipping pla tumble track dolly			

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference
Lighting				
	Light Types	°.		
		Ambient Light	Demonstrate how an ambient light differs from a point light and discuss its limitations	Watch video 25_Lights_IPR
		Directional Light	Demonstrate how the directional light mimics parallel light rays from the sun.	Watch video 25_Lights_IPR
		Point Light	Demonstrate how the point light emits light in all directions similar to various light sources	Watch video 25_Lights_IPR
		Spot Light	Demonstrate the extra attributes a spot light has, allowing for greater control when lighting	Watch video 25_Lights_IPR
		Area Light	Discuss the usage of area lights and their increased load on rendering time	Watch video 25_Lights_IPR
	Attributes			
		Common Attributes	Discuss those attributes that are common to all lights	Watch video 25_Lights_IPR
		Specific Attributes to certain lights	Discuss those attributes that are not common to all lights and only specific to some lightsfor e.g. Spotlight- Penumbra, Cone Angle , decay rates etc	Watch video 25_Lights_IPR
	Lighting: UI	*		·
		Light Linking Editor	Demonstrate how to illuminate objects with specific lights using the light linking editor	Watch video 26_Light linking _render settings_ shadows
	Shadows			
		Depth map Shadows	Demonstrate the advantages and limitations of depth map shadows	Watch video 26_Light linking _render settings_ shadows
		Raytrace Shadows	Discuss the need of raytrace rendering when using raytrace shadows and how ray depth limit effects shadow visibilitiy in a render	Watch video 26_Light linking _render settings_ shadows

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference
Materials_Shadin	g			
	Shading UI			
		Hypershade	Introduce the different areas within the hypershade and give a brief overview of their use and general workflow	Watch video 27_Hypershade UI
	Shading Cor	nponents	^	
		Materials	Discuss what materials are with real world examples. Give a brief introduction to materials and explain the difference between a material and a texture	Watch video 27_Hypershade UI
		Textures	Discuss what textures are with real world examples. Give a brief introduction to textures and explain the difference between file and procedural textures	Watch video 28_file texture
	Material Att	ributes		
		Common material Attributes	Give a brief overview of the most frequently used attributes like colour, transparency, bump and diffuse	Watch video 27_Hypershade UI
	Hypershade	UI		
		Toggle create bar on/off	Show how the create bar can be toggled on/off to get more screen real estate	Watch video 27_Hypershade UI
		Clear Graph	Demonstrate how to non-destructively clear the work area using clear graph	Watch video 28_file texture
		Rearrange Graph	Demonstrate how to organise multiple nodes in the work area using rearrange graph	Watch video 28_file texture
		Graph Materials on Selected Objects	Demonstrate how to view the shading network of a selected object using graph materials	Watch video 28_file texture
		Input and Output Connections	Demonstrate how to show all connections to selected nodes using Input and Output connections	Watch video 28_file texture
		Shaded and Textured Display in the viewport. Show it in the Panel Menu	Review the 6 hotkey here	Watch video 28_file texture

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Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
Materials_Shadin	g	÷		·			
	Material Types						
		Blinn	Demonstrate what surfaces resemble the properties of a Blinn material and compare it to a Phong material	Watch video 27_Hypershade U			
	Textures	File Texture	Demonstrate the difference between a file texture and a procedural texture discussing the advantages and limitations of both.	Watch video 28_file texture			
		2D Texture Attributes		Watch video 28_file texture			
		2D Procedural Texture	Demonstrate the difference between a file texture and a procedural texture discussing the advantages and limitations of both.	Watch video 29_2d & 3d procedurral			
		3D Procedural Texture	Demonstrate the difference between a 3D and 2D procedural texture	Watch video 29_2d & 3d procedurral			
	UV Texture Editor	Planar Mapping	Demonstrate the different ways a texture can be connected to an input and discuss the advantage of each method	Watch video3o_UV Texture Editor			
		Select Shell	Demonstrate how to select a UV shell for placement in the texture editor	Watch video30_UV Texture Editor			
		UV Snapshot	Demonstrate how UV Snapshot can be used to take your UV's into paint program	Watch video30_UV Texture Editor			
Animation							
	Keyframing Basics						
		Animation Terminology	Introduce the concept of Keyframes	Watch video 31_Aimation			
		Time Slider	Explain the timeslider and its use in animation	Watch video 31_Aimation			
		Range Slider	Explain the rangeslider and its use in animation	Watch video 31_Aimation			
	Preferences						
		Time Slider Preferences	Check vital settings in the Preferences Window for Time Slider and Playback	Watch video 31_Aimation			

Check vital settings for Time (Working Units)

Watch video 31_Aimation

Playback Preferences

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective	Reference			
Animation		÷					
	Creating Animation: Keyframing						
		Auto Key	Demonstrate AutoKey with a simple ball starting from the ground, being tossed up and falling back on the ground. Make sure to explain timeslider, rangeslider, playback preferences, time slider preferences, playback preferences configure the Maya UI for animation while using this example.	Watch video 32_Autokey Setkey			
		Set Key	Demonstrate setkey with a simple example. Introduce the 's' hotkey. Demonstrate SetKey with a simple ball starting from the ground, being tossed up and falling back on the ground. Make sure to explain timeslider, rangeslider, playback preferences, time slider preferences, playback preferences configure the Maya UI for animation while using this example.	Watch video 32_Autokey Setkey			
		Channel Box UI	Demonstrate how to create basic motion in the Channel Box	Watch video 33_Channel box_ timeslide_grapheditor			
		Key Selected (Channel Box)	Demonstrate how you animate from the channel box	Watch video 33_Channel box_ timeslide_grapheditor			
	Editing Anin	nation: Keyframing					
		Time Slider Animation Control	Demonstrate how to control basic object motion in the Time Slider	Watch video 33_Channel box_ timeslide_grapheditor			
	Editing Animation: Graph Editor						
		Graph Editor UI	Introduce basic controls only	Watch video 33_Channel box_ timeslide_grapheditor			
	Preview/Render Animation						
		Playblast	Demonstrate playblst and its options	Watch video 34_Motion Paths			
	Creating Animation: Motion Paths						
		Creating Animation: Motion Paths	Demonstrate how to animate objects on a path	Watch video 34_Motion Paths			

Industry Specific Topic	Sub-Topic	Content	Examples of Learning Objective		
Animation		÷			
	Playback				
		Play/Pause	Introduce the hotkey "Alt+v"		
		Go to next keyframe	Introduce the hotkey "."		
		Go to previous keyframe	Introduce the hotkey ","		
		Go to the previous frame	Introduce the hotkey "Alt +,"		
	Animation Deformers				
		Go to the next frame	Introduce the hotkey "Alt + ."		
		Blend Shapes			
Rendering					
	Render Settings				
		Common Tab	Give a brief overview of the various settings within the common tab focusing on the most important ones like file name prefix, image format, frame/animation ext, frame padding, renderable camera and image size		
	Renderer				
		Maya Software Renderer	Give a brief overview of the Maya Software renderer discussing its strengths and limitations		
	Batch Rendering				
		Batch Renderer	Discuss batch rendering with an example to render		
	IPR Rendering				
		IPR	Introduce the workflow of using the ipr to assist in feedback to changes made in a render		
			recuback to changes made in a render		

Reference

Watch video 34_Motion Paths

Watch video 34_Motion Paths Watch video 34_Motion Paths Watch video 34_Motion Paths

Watch video 34_Motion Paths Watch video 36_Blend Shapes

Watch video 35_Render settings

Watch video 35_Render settings

Batch render an animation and

disccus the project directory structure in Maya as to where

the rendered frame are saved.

Watch video 25_Lights_IPR

Watch video 25_Lights_IPR

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