



**UNIVERSITI TEKNOLOGI MARA**

**CID570: CERAMIC CAID SURFACE MODELING**

<b>Course Name (English)</b>	CERAMIC CAID SURFACE MODELING <b>APPROVED</b>
<b>Course Code</b>	CID570
<b>MQF Credit</b>	2
<b>Course Description</b>	This course will be focusing on various methods of producing ceramic surface modeling by using 2D and 3 D modeling software according to ceramic industry requirement. Assimilation from previous study on Adobe Photoshop and Adobe Illustrator design will be apply and convert onto 3 D modeling software on this course in right practical design process and sequence. Apart from that, this course will as well be discussing on practical understanding on the important of relief feature principals and elements towards embossed decoration according design process procedure.
<b>Transferable Skills</b>	CAD Skill
<b>Teaching Methodologies</b>	Lectures, Lab Work, Demonstrations, Tutorial, Computer Aided Learning
<b>CLO</b>	<p>CLO1 Differentiate relevant knowledge, attributes and skills in effective ways in accordance to the contexts of creative and innovative practices</p> <p>CLO2 Identifies the skills and principles of lifelong learning in their academic and career development within the specialized area as mention above</p> <p>CLO3 Explain the process of producing creative and innovative ceramic surface modeling by using 2 D and 3 D model design according to requirement in computer aided design application</p>
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. 1. Introduction to Ceramic CAID Surface Modelling</b>	
1.1) 1.1 Understand differences and similarities between solid bodies and surface bodies	
1.2) 1.2 Familiar with various components of the graphical user interface (GUI)	
<b>2. 2. Extrude Surface &amp; Trim Surface Features</b>	
2.1) 2.1 Project assignment 1 (Creating Extruded Surface, Trim Surface, Untrim Surface, Extruded Surface)	
<b>3. 3. Revolved Surface and Offset Surface</b>	
3.1) 3.1 Project Assignments 1b (Creating Extruded Surface, Trim Surface, Untrim Surface, Extruded Surface, Revolved Surface, Offset Surface)	
<b>4. 4. Lofted Surface &amp; Swept Surface</b>	
4.1) 4.1 Project Assignments 2 (Creating Revolved Surface, Offset Surface, Lofted Surface, Swept Surface, 3D sketch)	
<b>5. 5. Planar Surface</b>	
5.1) 5.1 Project Assignments 3 (Creating Extruded Surface, Trim Surface, Extruded Surface, Revolved Surface, Offset Surface, Lofted Surface, Swept Surface, Planar Surface)	
<b>6. 6. Knit Surface</b>	
6.1) 6.1 Project Assignments 3b (Creating Extruded Surface, Trim Surface, , Extruded Surface, Revolved Surface, Offset Surface, Lofted Surface, Swept Surface, Planar Surface, Knit Surface)	
<b>7. 7. Test 1</b>	
7.1) N/A	
<b>8. 8. Ruled Surface &amp; Boundary Surface</b>	
8.1) 8.1 Project Assignments 4 (Ruled Surface & Boundary surface)	

<p><b>9. 9. Filled Surface, Mid Surface, Delete Face &amp; Replace Face</b>  9.1) 9.1 Project Assignments 5 (Creating Extruded Surface, Trim Surface, Extruded Surface, Revolved Surface, Offset Surface, Lofted Surface, Swept Surface, Planar Surface, Knit Surface Filled Surface, Mid Surface, Delete face, Replace face)</p>
<p><b>10. 10. Split line &amp; Project Curve</b>  10.1) 10.1 Project Assignments 6 (Creating Thicken, Boundary cut, Thickened cut, , Fillet, Chamfer, Move/copy body, Freeform, Deform, Warp, Split line, Project curve, Composite curve, Curve through reference point, Helix and spiral)</p>
<p><b>11. 11. Freeform</b>  11.1) 11.1 Project Assignments 6b (Creating Thicken, Boundary cut, Thickened cut, , Fillet, Chamfer, Move/copy body, Freeform, Deform, Warp)</p>
<p><b>12. 12. Tableware Project</b>  12.1) N/A</p>
<p><b>13. 13. Personal / Individual / Group Projects</b>  13.1) N/A</p>
<p><b>14. 14. Test 2</b>  14.1) N/A</p>

<b>Assessment Breakdown</b>	<b>%</b>
Continuous Assessment	100.00%

<b>Details of Continuous Assessment</b>	<b>Assessment Type</b>	<b>Assessment Description</b>	<b>% of Total Mark</b>	<b>CLO</b>
	Assignment	Project assignments require student to gain knowledge , attributes and skills to the current CAID software related to 'Knowledge'	60%	CLO1
	Final Test	Produce design using solid and surface modelling to produce ceramic tableware to using CAID software related to 'Problem solving and scientific'	20%	CLO3
	Test	To ensure the student using the right commands and toolbars features in producing surface modeling design related to 'Social skills, Teamwork and Responsibilities'	20%	CLO2

<b>Reading List</b>	<b>Recommended Text</b>	• <b>Matt Lombard, <i>SolidWorks surfacing and complex shape modeling bible</i>, Wiley ; 2008. Hoboken, N.J. [ISBN: 0470258233]</b>
<b>Article/Paper List</b>	This Course does not have any article/paper resources	
<b>Other References</b>	This Course does not have any other resources	