



UNIVERSITI TEKNOLOGI MARA

DTC710: INTEGRATED MODELLING PROTOTYPE

Course Name (English)	INTEGRATED MODELLING PROTOTYPE APPROVED
Course Code	DTC710
MQF Credit	3
Course Description	An introductory course that demonstrates the integration of Computer-Aided-Design (CAD) and Computer-Aided-Manufacturing (CAM). The course commences with a brief revision in the use and application of 3D software in the design profession. This is a study of modern prototyping and machining methods, teaching the use of specific software for converting 2D and 3D CAD drawing geometry directly
Transferable Skills	demonstrate analytical skills using technology
Teaching Methodologies	Lab Work, Demonstrations, Tutorial, Simulation Activity, Computer Aided Learning, Supervision
CLO	<p>CLO1 Constructs ideas quickly, accurately and efficiently with software tools that set the standard for outstanding design for consumer products</p> <p>CLO2 Originates innovative consumer product models and addressing the unique creative requirements of the design workflow in line with production and manufacturing process</p> <p>CLO3 Produces a quality of 3D design, collaborate effectively, ensuring that designs address both aesthetic properties and functional requirements</p>
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Alias and the Interface 1.1) n/a	
2. Building with Primitives - 2.1) n/a	
3. Controlling Geometry 3.1) n/a	
4. Dimensional Accuracy 4.1) n/a	
5. Curve Tools 5.1) n/a	
6. Surface Tools NURBS Surface Structure 6.1) n/a	
7. Intersecting and Trimming- 7.1) n/a	
8. Introduction to Hardware Shade 8.1) n/a	
9. Sculpting NURBS Surfaces 9.1) n/a	
10. Projecting, Trimming, and Detailing - 10.1) n/a	
11. NURBS Continuity, Align, and Surface Fillet 11.1) n/a	
12. Blend Curves and Blend Surfaces 12.1) n/a	

13. Introduction to animating

13.1) n/a

14. Students Final Assignment Development

14.1) n/a

Assessment Breakdown		%	
Continuous Assessment		100.00%	

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Resource, Analysis & Design	20%	CLO1
	Assignment	Design Concept	20%	CLO2
	Assignment	Product Design Specification	20%	CLO3
	Assignment	Presentation (Final Assessment)	40%	CLO3

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> • BR0A1-000000-MZ82 2009, <i>Auto Desk Alias Design</i>, Autodesk, Inc. All rights reserved • 2006, <i>Alias DesignStudio 13</i>, Sybex; Pap/Dvdr • Fridolin T.Beisert 1913, <i>The basics of ALIAS STUDIO</i>

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources