



UNIVERSITI TEKNOLOGI MARA

INA424: COMPUTER AIDED DRAFTING

Course Name (English)	COMPUTER AIDED DRAFTING APPROVED				
Course Code	INA424				
MQF Credit	2				
Course Description	This course is being introduced as to fulfill the industry needs, where skill of computer aided draftsmanship is compulsory. The course starts with basic CAD computer software and hardware set up, follow up by basic management and maintenance of hardware and software before proceeding to the actual practice of manipulation of command and tools to produce working drawings for interior design projects. Alternative 2D vector based graphic software is also thought to produce drawings for presentation purposes.				
Transferable Skills	2D Computer				
Teaching Methodologies	Lectures, Demonstrations, Tutorial				
CLO	<p>CLO1 Apply Computer Aided Design (AutoCAD) drawings by demonstrating knowledge and understanding of basic drafting content and skills.</p> <p>CLO2 Comply various AutoCAD technique and approach that are commonly used in design elements such as command and construction.</p> <p>CLO3 Demonstrate the advantages of AutoCAD in preparing design plans and to set up AutoCAD standards for layers, plotting, symbol libraries, and so on by using a proper drafting dimensioning and labelling techniques.</p>				
Pre-Requisite Courses	No course recommendations				
Reading List	<table border="1"> <tr> <td>Recommended Text</td> <td> <ul style="list-style-type: none"> • F.D.K. Ching. 1991, <i>Building Construction Illustrated</i>, Ed., , New York: John Wiley & Sons, Inc. [ISBN:] • My Cad Site. 2009, <i>48 Free Autocad Tutorials. A Complete Course</i> Ed., , http://www.we-r-here.com/cad/tutorials/index. [ISBN:] • Leinbach, R.B. 1990, <i>Visualization Techniques</i>, 2 Ed., , New Jersey: Prentice Hall Inc. [ISBN:] • Kennedy, E.L. 1996, <i>CAD Drawing, Design, Data Management</i>, Ed., , NY: Wiltney Library of Design. [ISBN:] • Ballast, D.K. 1996, <i>Practical Guide to Computer Applications for</i> , Ed., , New Jersey: Prentice Hall. [ISBN:] • Grabowski, Ralph. 2002, <i>CAD Manager's Guidebook</i>, Onward Press/Thomson Learning • National Engineering Manual 2004, <i>Drafting and Drawings</i>, 541 Ed., United States Department of Agriculture, Natural Resources Conservation Service • United States Department of Agriculture 2006, <i>Computer Aided Design (CAD) Standards</i>, 1, Natural Resources Conservation Service </td> </tr> <tr> <td>Reference Book Resources</td> <td> <ul style="list-style-type: none"> • Randy, H. Shih 2008, <i>AutoCAD 2008 Tutorial</i>, Ed., , Oregon, USA: Schroff Development Corporation [ISBN:] • About.com 2009, <i>Learning Canvas Canvas Tutorials and Tips</i>, Ed., , http://graphicssoft.about.com/od/canvastutori [ISBN:] </td> </tr> </table>	Recommended Text	<ul style="list-style-type: none"> • F.D.K. Ching. 1991, <i>Building Construction Illustrated</i>, Ed., , New York: John Wiley & Sons, Inc. [ISBN:] • My Cad Site. 2009, <i>48 Free Autocad Tutorials. A Complete Course</i> Ed., , http://www.we-r-here.com/cad/tutorials/index. [ISBN:] • Leinbach, R.B. 1990, <i>Visualization Techniques</i>, 2 Ed., , New Jersey: Prentice Hall Inc. [ISBN:] • Kennedy, E.L. 1996, <i>CAD Drawing, Design, Data Management</i>, Ed., , NY: Wiltney Library of Design. [ISBN:] • Ballast, D.K. 1996, <i>Practical Guide to Computer Applications for</i> , Ed., , New Jersey: Prentice Hall. [ISBN:] • Grabowski, Ralph. 2002, <i>CAD Manager's Guidebook</i>, Onward Press/Thomson Learning • National Engineering Manual 2004, <i>Drafting and Drawings</i>, 541 Ed., United States Department of Agriculture, Natural Resources Conservation Service • United States Department of Agriculture 2006, <i>Computer Aided Design (CAD) Standards</i>, 1, Natural Resources Conservation Service 	Reference Book Resources	<ul style="list-style-type: none"> • Randy, H. Shih 2008, <i>AutoCAD 2008 Tutorial</i>, Ed., , Oregon, USA: Schroff Development Corporation [ISBN:] • About.com 2009, <i>Learning Canvas Canvas Tutorials and Tips</i>, Ed., , http://graphicssoft.about.com/od/canvastutori [ISBN:]
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Article/Paper List	Recommended Article/Paper Resources	<ul style="list-style-type: none"> • Rani, A., Wahab, A., Shaarani, R. & Aziz, A. 2001, Facilitating Learning of Engineering Graphics Instead of Learning CAD System., 2 • Stiharu, I & Rakheja, S. 2003, Knowledge, perception and representation in engineering graphics, <i>International Conference on Engineering Education</i>, July 2003 • Helbling, J., Marriott, D. & Gally, T. 2007, Applied Computer Aided Design Using Aerospace Vehicles for Sophomore Level Students,, <i>American Society of Engineering Educators Annual Conference</i>, 2007-2701 • Djassemi, M. 2007, A Hands-on approach to teaching CAD/CAM for manufacturing and rapid prototyping applications, <i>American Society of Engineering Educators Annual Conference</i>, 2007-1196 • Lin, T., Sharif Ullah, A. M. M., & Harib, K. H. 2006, On the Effective Teaching of CAD/CAM at the Undergraduate Level, <i>Computer-Aided Design & Applications</i>, Vol 3, 331-3 • Nathan W. Hartman 2004, Defining Expertise in the Use of Constraint-based CAD Tools by Examining Practicing Professionals, <i>Proceedings of the 2004 American Society for Engineering Education Annual Conference and Exposition</i>
Other References	This Course does not have any other resources	