

Engineering Drawing (Arts)

Prerequisite Information:	None	Subject Co-requisite:	ComputerAid
Course Number:	10000	Course Title and Number of Credits:	1
Class Format:	Lecture	Prerequisite Co-requisite:	None
Classroom:	Computer	Prerequisite Corequisite:	None
Prerequisites:	None	Prerequisite Corequisite:	None
Prerequisite Materials:	Basic Art Equipment - Good sketch or basic software devices that can use BASIC TRACER/AD and Sketch-up		
Instructor:	A. Elwan, T. Elwan	Instructor:	T. Elwan, A. Elwan

Course Objectives:	1. Explain about the connection point Art and Engineering how to apply them for hand benefit in career path. 2. Learning and practical basic ideas for skills in Engineering Department with materials, tools, instrumentation processes that enhance communication of ideas through art. 3. Enhance the creative skill of Art that benefits Engineering. Skill such as Art through Commercial Art that includes the applied art.		
Evaluation/Assess:	Level Level of Achievement: Very Good	Standard Level of Achievement: Good	Unacceptable Level of Achievement: Fail
ART and Engineering	Can decide what has been learned to create a conceptual approach to the specified task and use them to make real world designs including the program customer aspects of both topics. Able to work in multidisciplinary environment.	Able to apply knowledge to presentation. Show skills with of working correct if more elaborate. The visual elements, the equipment of the subject connections would presentation.	Able to apply knowledge to presentation. Looked about the figure of common used from Engineering and Art.
Commercial Art	Students work a variety of all the disciplines from design with very good understanding of the design process. Able to work with the design process. Able to work with the design process. Able to work with the design process.	The results show good intentions, communication and apply the principles that applied.	The task has not an advanced the purpose. Study the use of the design process. The results show that it is more thoughtful and creative. It will be more thoughtful.
Art in Daily Life/History of Art	The completion a complete class three ideas from each topic and presentation can work the elements of art. Visual elements and conceptual ideas from the design that from communication through the work.	The work shows to the question. Can apply their own ideas to make and create art work, conceptual and from the design that from communication through the work.	The work shows to the question. Use visual elements to be out of the ordinary. Making a title more detail will help to be out of the ordinary.
Basic Engineering Drawing/Basic Technical Drawing	Students work a variety of all the disciplines from design with very good understanding of the design process. Able to work with the design process. Able to work with the design process.	The results show good, reasonable, and apply the principles that applied.	The results show that not enough reasonable. Able to apply the principles that applied to be more to consider.

- Learning with Learning Outcomes**
- LO1: Write knowledge on science and engineering and creative ability to reach them to solve problems in the world.
 - LO2: Write knowledge on science and engineering and creative ability to reach them to solve problems in the world.
 - LO3: Enrich personality with wide range knowledge and understanding of history, culture and society of Thailand and live of nation.

Course Material:	Study Art how and understand the connection between "Art" and "Engineering", as well as able to apply knowledge to further career (to some ART and ENGINEERING areas that can be benefit a suitable idea).
Class Format:	Lecture for the art media, including in-class only to homework, a small self study project and presentation. Teacher always give a suggestion in all forms. Each individual idea, teacher will walk some focus about art design innovation etc, that interesting to students and give them the chance to express their thoughts through ART (ONCE A DAY).
Class Note:	

Course Week	Topic and Content of Course	Goal	Related LEO
1st week	Introduction class (Survey student expectation)	Course details, content, workload and overall course requirements throughout the semester as well as answering the primary needs of students. (Review based on week 6, 10)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
2nd week	Chapter 1: ART and Engineering	Learn the connection between art and engineering. Analyzing the relationship between engineering points of both subjects. (Group Work: Workshop/ Presentation)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
3rd week	Chapter 2: Commercial Art 1	Study and make conceptual art such as FORM, PICTURE that contained in GRAPHIC, the work based on order to commercial art. The section based on DESIGN and Service in design work. (Project: TVCM, Lecture and Management Work sheet)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
4th week	Chapter 2: Commercial Art 2	Study and make conceptual art such as FORM, PICTURE that contained in GRAPHIC, the work based on order to commercial art. The section based on DESIGN and Service in design work. (Project: Paper and Identity, Group Work: Crafted PROJECT: Art through technique 50%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
5th week	Chapter 2: Commercial Art 3	Art Practice Class by Art Printing technique LINDO-CUT OFF-UP (Group Work: Crafted PROJECT by Art Printing technique 100%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
6th week	Chapter 3: Art in Daily Life 1	Apply the knowledge to innovate the new things that can be benefit a suitable idea. (Group Project: 50%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
7th week	Chapter 3: Art in Daily Life 2	Study about Creative, Apply and make the new one with suitable Creative from 50% group work. (Group Project: 100%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
8th week	Chapter 4: Basic Pictorial View 1	Able to analyze basic pictorial view. Practice from the dimension of Geometry shape. Be able to find the technique. (Group Project: Paper Crafted 50%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
9th week	Chapter 4: Basic Pictorial View 2	View Practice from the dimension of Geometry objects can be find the technique. Continue from week 8th. The content is more design with the crafted and creative idea to create a good. (Group Project: Paper Crafted 100%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
10th week	Midterm Examination		
11th week	Chapter 5: Basic Engineering Drawing 1	Learn about the basic view reading and 3D drawing that are understood to engineering drawing in the higher level in engineering drawing. (In-class: Pictorial Exercise Sheet)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
12th week	Chapter 5: Basic Engineering Drawing 2	Learn about the basic view reading and 3D drawing that are understood to engineering drawing in the higher level in engineering drawing. (In-class: Basic Pictorial Exercise Sheet)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
13th week	Chapter 5: Basic Engineering Drawing 3	Learn to create a basic 3D object using Tracer CAG Basic Software. (In-class: Basic Pictorial Exercise Sheet) 2	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
14th week	Chapter 6: Art in Daily Life 3	Final Side Art Project (Students how to design their individual project that will be an artwork or craft that they think it is good that teacher will support and give some ideas).	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
15th week	Chapter 6: Art in Daily Life 4	Apply the knowledge to innovate the new things that can be benefit a suitable idea. (Group Project: 50%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
16th week	Chapter 6: Art in Daily Life 5	Study about Art activity that related to art craft. Apply in a class that new one will demonstrate Continue from 15th week group work. (Group Project: 100%)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
17th week	Chapter 7: History of Art 1	Learn about art around the world around that can be applied from to connect with engineering relevant subject. (Group Project: Presentation)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
18th week	Chapter 7: History of Art 2	Art that refer to innovation from basic to future innovation. (Group Project: Presentation / Research)	B-1, 1-1 B-2, 2-1 B-3, 3-1 B-4, 4-1 B-5, 5-1
19th week	Presentation Conclusion all discussion project to each other.		
20th week	Final examination		

Prerequisite:	Prerequisite:	Prerequisite:	Prerequisite: