

CADD ET0085

WEEK 1 – LESSON INSTRUCTIONS

Objectives:

To comprehend basic 2D-AutoCAD 2020 and draw efficiently Part 1.

Topics (All material are posted in Blackboard):

1. **Download AutoCAD 2020** into your Notebook
2. **Introduction** to AutoCAD 2020
3. **Basic settings** in AutoCAD 2020
4. **Creating frequently used Toolbars:** Draw, Modify, Draw Order, Dimensions, Layers & Properties
5. **Drawing Aids & Status Toolbar:** Zoom, Grid, Snap, Ortho, Object Snap
6. 2D AutoCAD **DRAW commands:** Rectangle, Circle, Arc, Donut, Lines, Multilines, Sketch
7. 2D AutoCAD **MODIFY commands:** Copy, Move, Mirror, Offset, Trim, Explode, Undo, Erase
8. **Exercise 1A & 1B:** Drawing Practice & submission.

Lessons:

Introduction to AutoCAD 2020

1. **Download free AutoCAD 2020 into your notebook** (Students & Teachers version) from Autodesk Website and create an Account first:

www.autodesk.com/education/free-software/autocad

After Autodesk Account is created:

- Choose your version of Notebook
- Operating System
- Language

Next follow instructions from Autodesk website and continue downloading.

If you have problems downloading AutoCAD 2020, please go to SP Helpdesk at T1711 to download or call 67721260 for help. Please fix appointment first. However, you may have to wait till you are allowed to visit helpdesk in SP when students are allowed to return to SP because of COVID 19 situation. If that is the case, then you can only read and watch videos relevant to the particular week learning schedule in BB → LEARNING

RESOURCES → TEACHING SCHEDULE. You can later do the exercises and practice AutoCAD 2020 once you have installed AutoCAD 2020 in your notebook subsequently.

2. Read [CADD ET0085 Blackboard \(BB\) → UNIT1A to launch AutoCAD 2020 in Notebook or SP Workstation \(Page 7\)](#) and Familiarise navigating AutoCAD 2020 software by clicking [LEARN \(Page 9\)](#).
3. Online Training videos are available in Library and also posted in BB Announcement Week 1 namely (However, you have to create an account first before seeing the videos):
 - i. <http://www.solidworks-tutorials.com.ezp1.lib.sp.edu.sg/01/AC/index.html>
 - ii. <https://www.linkedin.com/learning/me?u=2122804>

Then click: AUTOCAD 2020 ESSENTIAL TRAINING to learn all about AutoCAD 2020.

4. Read [CADD ET0085 Blackboard \(BB\) → Announcement every week](#). Announcement will be posted every Friday the week before at 6am.

5. Read [BB→ Module Information](#):
 - i. [MODULE OVERVIEW & SYLLABUS](#)
 - ii. [MODULE MAP \(TEACHING SCHEDULE\)](#). Some of the MODIFY commands from week 2 will be done in week 1 to use in Exercise 1A.
 - iii. [RECOMMENDED TEXT](#)
 - iv. [MEANS OF ASSESSMENT & GRADING POLICY](#)

Basic Settings in AutoCAD 2020 (8 Settings)

1. Read [BB→ Learning Resources→ LAB](#):
 - i. [UNIT 1 \(Read completely & Practice & set all the 8 settings\)](#):
 - [Page 44 to 58](#)
 - It's important to complete all 8 settings before commencing on any AutoCAD drawings as it helps to complete drawing efficiently

Creating Frequently used Toolbars

1. Read [BB→ Learning Resources→ LAB](#):
 - i. [UNIT 1A \(Read completely. Practice & create Frequently used toolbars using AutoCAD 2020\)](#) especially:
 - [Page 19 to 26](#) to learn how to insert frequently used toolbars efficiently. Complete this insertion of frequently toolbars in your Notebook. The frequently used toolbars will appear subsequently even when you logout and then login again later.
 - [Page 27](#) to learn how to save & open files
 - [Page 40 to 43](#) to learn keyboard shortcuts
 - All these methods helps to draw efficiently

Drawing Aids & Status Toolbar

1. Read [BB→ Learning Resources→ LAB](#):
 - i. [UNIT 1A on Status Toolbar \(Move cursor to icon to locate command options. Basic Settings will activate frequently used icons such as Grid, Snap & Object Snap\)](#):
 - [Page 11](#)

2D AutoCAD DRAW Commands

1. Read [BB→ Learning Resources→ LAB](#):
 - i. [UNIT 2 \(Read & Practice Topic on DRAW Commands\)](#) especially:
 - [Page 59 to 83](#) to learn & practice how to draw Rectangle, Circle, Arc, Donut, Lines, Multilines, Sketch
 - ii. [Videos on Draw commands](#) are available as shown in the link [Introduction to AutoCAD 2020](#) at the beginning of this lesson. Google or find in utube the AutoCAD 2020 DRAW commands for more information.

2D AutoCAD Modify Commands

1. Read BB→ Learning Resources→ LAB:
 - i. **UNIT 3** (Read & Practice Topic on MODIFY Commands) especially:
 - [Page 84 to 104 to learn & practice how to modify using Copy, Move, Mirror, Offset, Trim, Explode, Undo, Erase](#)
 - ii. [Videos on Modify commands](#) are available as shown in the link [Introduction to AutoCAD 2020](#) at the beginning of this lesson. Google or find in utube the AutoCAD 2020 MODIFY commands for more information.

Exercise 1A & 1B: Drawing Practice

2. Read Exercise 1A & 1B Guided Solutions and BB→ Learning Resources→ LAB:
 - i. **UNIT 6** (Exercises for Practice using AutoCAD) especially:
 - iii. [Page 133 to 134 \(Exercise 1A\): Practice & Learn how to draw an A3 size template.](#)
 - iv. [Ignore drawing the dimensions and text as it's not covered yet.](#)
 - v. [Save in File Name: ADMISSION NO-FULL NAME-EXERCISE 1A \(All capital letters\)](#)
[E.g. P2012345-TAN AH KOW-EXERCISE 1A](#)
[No submission require but practice to make perfect and draw proficiently.](#)
 - vi. This exercise 1A with guide helps to re-enforced your comprehension of AutoCAD 2020 introduction, setting and application of Basic Draw & Modify commands.
 - vii. There is another guided **Exercise 1B** where a drawing **paper size 250mm x 250mm complete with template** is created. Please complete the Exercise 1B too by following the guided steps given in the pdf file and save: **P2012345-TAN AH KOW-EXERCISE 1B**
 - viii. [No submission require but practice to make perfect and draw proficiently.](#)

END OF WEEK 1 LESSON