

Міністерство освіти і науки України  
Харківська національна академія міського господарства

**Launching AutoCAD. AutoCAD files and folders.**

**Guidance for laboratory works for “Informatics and computer modeling basics” course /for foreign students of 2nd year studying by orientation 6.060102 «Architecture»/**

Харків – ХНАМГ – 2009

Виклик програми AutoCAD. Файли і каталоги AutoCAD: Методичні вказівки до виконання лабораторних робіт з курсу “Інформатика і основи комп'ютерного моделювання” (англ.) /для студентів 2 курсу напряму підготовки 6.060102 «Архітектура»/ Укл.: Бочаров Б.П., Яковицький І. Л., Воєводіна М.Ю., Левіков Ю.В.– Х.: ХНАМГ, 2009. – 15с.

Укладачі: Б. П. Бочаров,  
І. Л. Яковицький,  
М. Ю Воєводіна,  
Ю.В. Левіков.

Рецензент: канд.фіз-матем.наук А.Б. Костенко

Рекомендовано кафедрою Прикладної математики і Інформаційних технологій,  
протокол № 6 від 24 січня 2009 р.

**Theme: Launching AutoCAD. AutoCAD files and folders**

**Purpose: acquiring skills of work with disks, folders and files (documents) in AutoCAD**

**Work order:**

1. Create a folder with the same name as the name of your group in “My documents” folder.
2. Create a personal folder, the folder name is your surname (use the English alphabet), in this folder.
3. Open AutoCAD.
4. Create 4 drawings in AutoCAD and save them in your personal folder (the surname is written in the English alphabet):
  - *surname\_ris1.dwg*
  - *surname\_ris2.dwg*
  - *surname\_ris3.dwg*
  - *surname\_ris4.dwg*
5. Exit AutoCAD.
6. Open AutoCAD.
7. Open all these 4 drawings created before and locate them with the “Arrange Icons” in the Window menu.
8. In every drawing, draw a picture using the lines, circles and arcs drawing commands.

9. Save all the drawings.

10. Compress all the drawings in the same archive folder.

11. Save this archive in the Academy distance learning system.

## **Operations with AutoCAD Drawings**

A quick way to begin a new drawing is to start from scratch, which starts a drawing that uses settings from a default drawing template file.

You can start from scratch from the Create New Drawing dialog box, from the Select Template dialog box, or without using a dialog box at all. In each case, you use either the NEW command or the QNEW command.

### **Create New Drawing Dialog Box**

The following conditions must be met to display the Create New Drawing dialog box:

- The STARTUP system variable is set to 1 (on).
- The FILEDIA system variable is set to 1 (on).

The dialog box defines the settings for a new drawing. Start from Scratch creates a new drawing using either imperial or metric default settings. Use a Template creates a new drawing using the settings defined in a drawing template you select. Use a Wizard creates a new drawing using the settings you specify in either the Quick or Advanced wizard. (The first option, Open a Drawing, is not available from the NEW command. To open an existing drawing, use OPEN.)



*– Start from Scratch*

Starts an empty drawing using default imperial or metric settings

(MEASUREINIT system variable). You can change the measurement system for a given drawing by using the MEASUREMENT system variable. The Drawing1.dwg that opens when you start the program is a drawing that is started from scratch.

### Imperial

Starts a new drawing based on the imperial measurement system. The default drawing boundary (the grid limits) is 12 by 9 inches.

### Metric

Starts a new drawing based on the metric measurement system. The default drawing boundary (the grid limits) is 429 by 297 millimeters.

### Tip

Displays a description of the selected measurement setting.



### *– Use a Template*

Starts a drawing based on a drawing template file. Template drawings store all the settings for a drawing and may also include predefined layers, dimension styles, and views. Template drawings are distinguished from other drawing files by the .dwt file extension. They are normally kept in the template directory.

Several template drawings are included with this program. You can make additional template drawings by changing the extensions of drawing file names to .dwt.

### Select a Template

Lists all DWT files that currently exist in the drawing template file location, which is specified in the Options dialog box. Select a file to use as a starting point for your new drawing.

### Preview

Displays a preview image of the selected file.

### Browse

Displays the Select a Template File dialog box (a standard file selection dialog box), where you can access template files that are not available in the Select a

Template list.

### Template Description

Displays a description of the selected template. If you create your own template, you can use the Template Options dialog box to specify the text that you want to display here. See the SAVEAS command.



### *– Use a Wizard*

Sets up a drawing using a step-by-step guide. You can choose from two wizards: Quick Setup and Advanced Setup.

#### Quick Setup

Displays the Quick Setup wizard, in which you can specify the units and area for your new drawing. The Quick Setup wizard also changes settings, such as text height and snap spacing, to an appropriate scale.

#### Advanced Setup

Displays the Advanced Setup wizard, in which you can specify the units, angle, angle measure, angle direction, and area for your new drawing. The Advanced Setup wizard also changes settings, such as text height and snap spacing, to an appropriate scale.

### Wizard Description

Displays a description of the selected wizard.

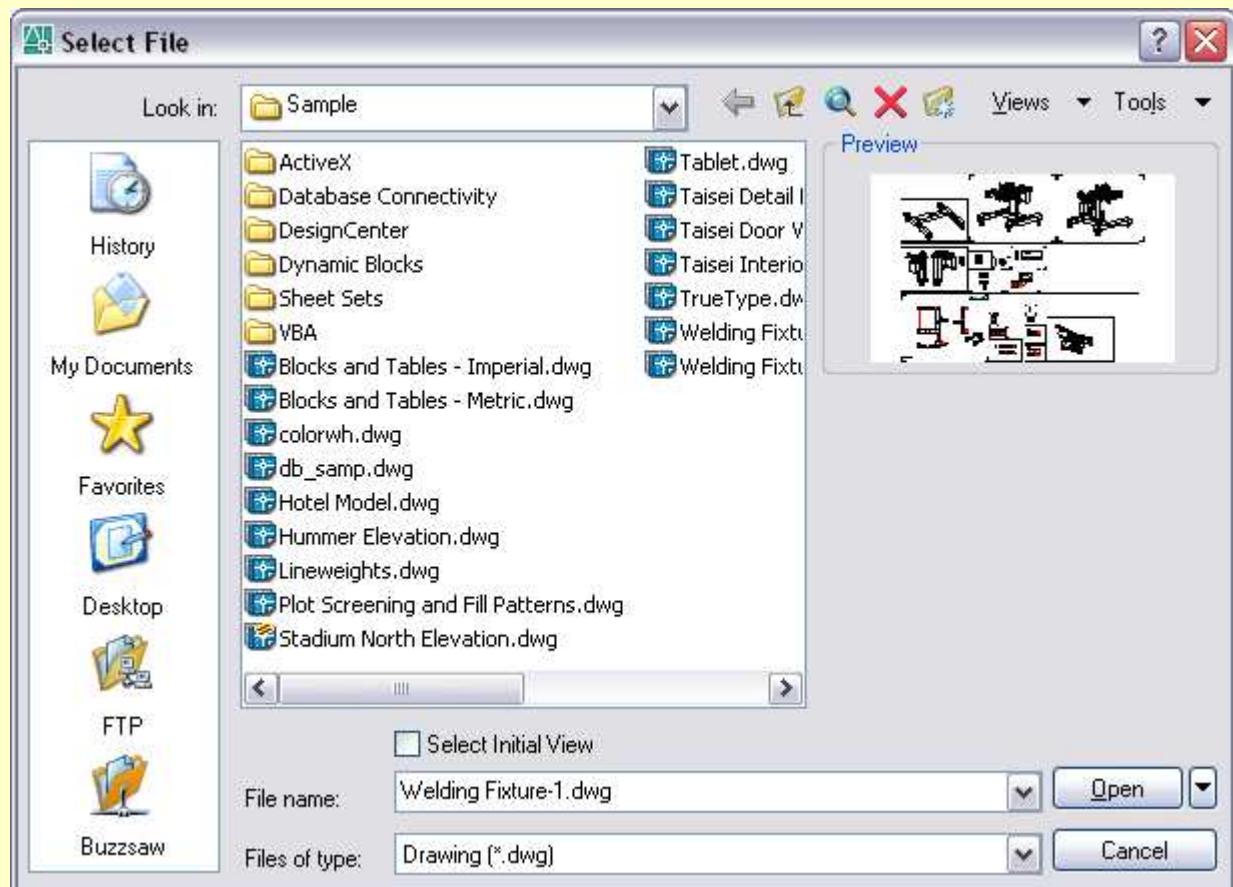
## **Standard File Selection Dialog Boxes**

Several commands display standard file selection dialog boxes, in which you can navigate through local and network drives and through FTP sites and Web folders to select files. While each dialog box may vary slightly, following is a list of the possible options.

1. Places List. Provides quick access to predefined locations. You can reorder the icons in the Places list by dragging them to a new position. To add a new icon to

Places, drag a folder from the list. Right-click in Places to display a shortcut menu with options for adding, removing, and modifying icons or restoring default icons that have been removed. Changes to Places affect all standard file selection dialog boxes.

- History. Displays shortcuts to the files most recently accessed from the dialog box. It is recommended that you periodically remove unwanted shortcuts from the History list. Select History, then select the unwanted shortcuts in the Files list and click Delete. To sort the shortcuts by date, click Views Details, and then click the Modified column in the Files list.



- Personal/My Documents. Displays the contents of the Personal or My Documents folder for the current user profile. The name of this location (“Personal” or “My Documents”) depends on your operating system version.
- Favorites. Displays the contents of the Favorites folder for the current user

profile. This folder consists of shortcuts to files or folders that you added to Favorites using the Tools Add to Favorites option in the dialog box.

- **FTP**. Displays the FTP sites that are available for browsing in the standard file selection dialog box. To add FTP locations to this list, or to modify an existing FTP location, click Tools Add/Modify FTP Locations in the dialog box.
  - **Desktop**. Displays the contents of your desktop.
  - **Buzzsaw**. Provides access to Buzzsaw projects. Buzzsaw is a secure Internet-based collaboration and project management service that connects project teams in different locations. To use Buzzsaw, you must already have a project hosting account on Buzzsaw or be given access to a subscriber's Buzzsaw site. If you do not yet have a project hosting account on Buzzsaw, clicking Buzzsaw displays the Select Template dialog box where you can add a Buzzsaw location shortcut. Double-clicking Add a Buzzsaw Location Shortcut opens the Log In To Buzzsaw dialog box where you can register for a free 30-day trial subscription to the service. Also, the first time you access Buzzsaw, your default web browser opens with the project hosting page displayed. If you already have a project hosting account, clicking Buzzsaw shows all of your project sites in the Site list.
2. **Look In/Save In**. Displays the current folder or drive. Click the arrow to view the hierarchy of the folder path and to navigate up the path tree or to other drives, network connections, FTP locations, or web folders (either Web Folders or My Network Places, depending on the version of your operating system). You can create web folders in Windows Explorer. Consult your system administrator or Windows Explorer Help for more information about web folders. To control whether the last used paths in each particular standard file selection dialog box are stored across sessions, use the REMEMBERFOLDERS system variable.
  3. **Back**. Returns to the previous file location.
  4. **Up One Level**. Navigates one level up in the current path tree.
  5. **Search the Web**. Displays the Browse the Web dialog box, from which you can

access and store files on the Internet.

6. Delete. Deletes the selected file or folder.
7. Create New Folder. Creates a new folder in the current path using a name that you specify.
8. Views. Controls the appearance of the Files list or Folders list and, for a Files list, specifies whether to show a preview image when a file is selected.
  - List. Displays a multicolumn list.
  - Details. Displays a single-column list with file details.
  - Preview. Displays a bitmap of the selected file. The Preview area is blank if you do not select a file. To save a bitmap with a drawing file, use the Save a Thumbnail Preview Image option on the Open and Save tab in the Options dialog box.
9. Tools. Provides tools to help with file selection and other actions available in file selection dialog boxes.
  - Find. Displays the Find dialog box, in which you can search for files using name, location, and date-modified filters.
  - Locate. Uses the AutoCAD search path to locate the file specified in File Name. You set the search path on the Files tab in the Options dialog box.
  - Add/Modify FTP Locations. Displays the Add/Modify FTP Locations dialog box, in which you can specify the FTP sites to make available for browsing. To browse these sites, select FTP from the Places list.
  - Add Current Folder to Places. Adds an icon for the selected folder to the Places list, providing quick access to that folder from all standard file selection dialog boxes. To remove the icon, right-click the icon and choose Remove.
  - Add to Favorites. Creates a shortcut to the current Look In location, or to the selected file or folder. The shortcut is placed in the Favorites folder for the current user profile, which you can access by choosing Favorites in the Places list.
  - Look in Favorites. Sets the Look In path to your system's Favorites folder.

- Options. Provides additional options for certain standard file selection dialog boxes.
- Security Options. Provides options for a digital signature and password that are invoked when you save a file.

10. Files List. Displays the files and folders in the current path and of the selected file type. Use the Views menu in the dialog box to switch between List view and Details view.

11. Preview. Displays a bitmap of the selected file when you choose Views Preview in the dialog box. The Preview area is blank if you do not select a file. To save a bitmap with a drawing file, use the Save a Thumbnail Preview Image option on the Open and Save tab in the Options dialog box.

12. File Name. Displays the name of the file you select in the Files list. If you select multiple files, File Name displays each selected file within quotation marks. If you enter a file name in the File Name box, any selection is cleared. You must use quotation marks when entering multiple file names. You can use wild-card characters to filter files displayed in the Files list.

13. Files of Type. Filters the list of files by file type. When you are saving files, Files of Type specifies the format in which the file is saved.

14. Select Initial View. Displays the specified model space view when you open the drawing if the drawing contains more than one named view.

15. Update Sheet and View Thumbnails Now. Reflects the current setting of the UPDATETHUMBNAIL system variable. This option temporarily overrides that setting. Clear the checkbox to save the file without updating thumbnails. Check the box to update all thumbnails. This option does not change the current setting of UPDATETHUMBNAIL.

16. Open/Save. Depending on the purpose of the specific file selection dialog box, opens or saves the selected file or enters the path of the selected folder in the previous dialog box. Certain file selection dialog boxes may include additional options, accessed by clicking the arrow next to the Open button.

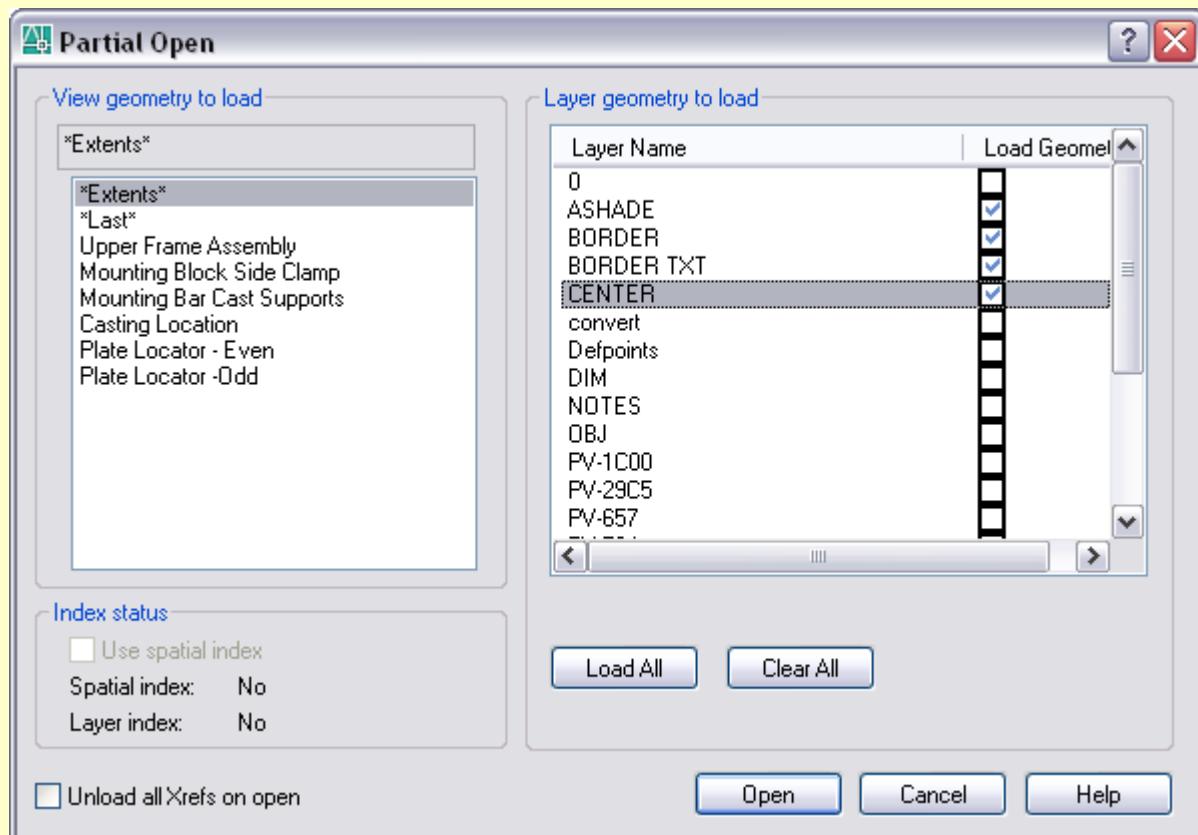
- Open Read-Only. Opens a file in read-only mode. You cannot save changes

to the file using the original file name.

- Partial Open. Displays the Partial Open dialog box. You can open and load a portion of a drawing, including geometry on a specific view or layer. PARTIALOPEN cannot be used with a drawing that is not in the latest drawing file format.
- Partial Open Read-Only. Opens the specified drawing portions in read-only mode.

### Partial Open Dialog Box

The dialog box displays the drawing views and layers available for specifying what geometry to load into the selected drawing. When working with large drawing files, you can select the minimal amount of geometry you need to load when opening a drawing.



When a drawing is partially open, all named objects, as well as the specified

geometry, are loaded into the file. Named objects include blocks, dimension styles, layers, layouts, linetypes, text styles, UCSs, views, and viewport configurations.

## Save AutoCAD Drawings

You save drawing files for later use just as you do with other Microsoft Windows applications. You can also set up automatic saving and backup files and save only selected objects.

When you work on a drawing, you should save it frequently. Saving protects you from losing work in the event of a power failure or other unexpected event. If you want to create a new version of a drawing without affecting the original drawing, you can save it under another name.

The file extension for drawing files is .dwg, and unless you change the default file format in which drawings are saved, drawings are saved in the latest drawing file format. This format is optimized for file compression and for use on a network.

The character limit for a DWG file name (including its path) is 256 characters.

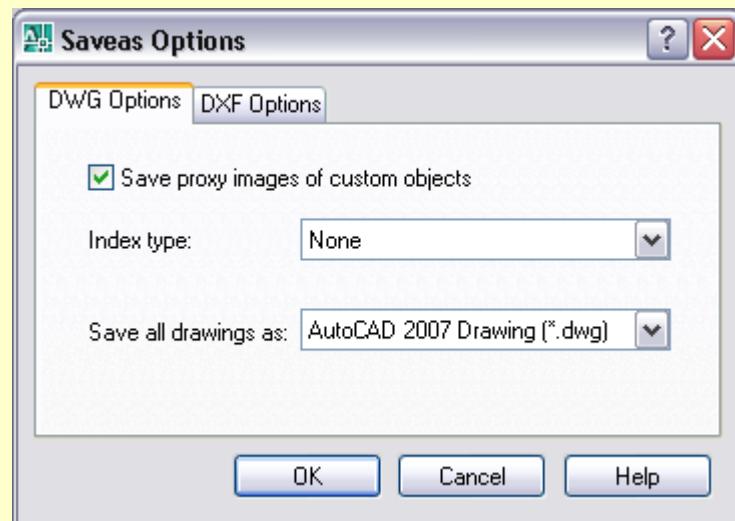
If FILEDIA is set to 1 the *Save Drawing As* standard file selection dialog box is displayed. When FILEDIA is set to 0, SAVEAS displays command prompts.

Enter a file name and type.

Note. AutoCAD 2004 is the drawing file format used by the AutoCAD 2004, AutoCAD 2005, and AutoCAD 2006 releases.

In the *Save Drawing As* dialog box, Tools Options displays the Saveas Options dialog box, which controls various DWG and DXF settings.

*DWG Options Tab (Saveas Options Dialog Box)* controls the drawing index and display of custom objects and specifies the default file format for saving drawings.



### Save Proxy Images of Custom Objects

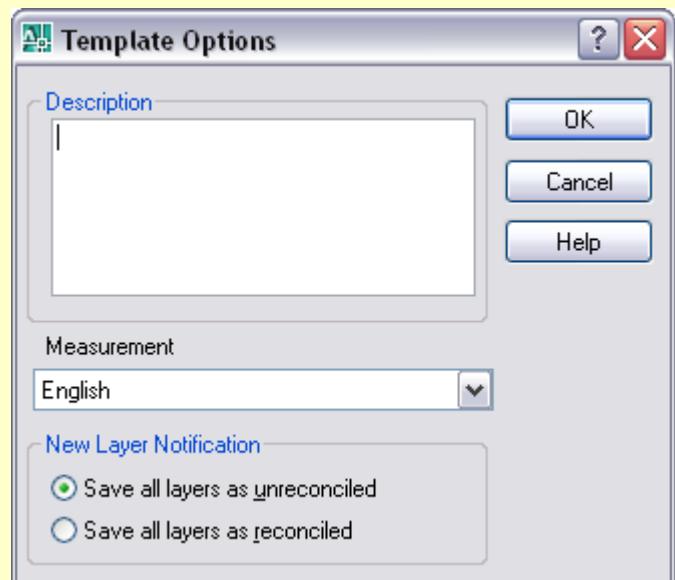
If you save to an earlier drawing file type, or the drawing contains custom objects from another application, you can select Save Proxy Images of Custom Objects to save images of the custom objects in the drawing file. If you do not choose this option, a frame is saved for each custom object in the drawing file. (PROXYGRAPHICS system variable). If you are saving a drawing file that contains DWF references to an earlier drawing format, this switch has no effect on DWF underlays as they will not appear as proxy objects or as a frame.

### Index Type

Determines whether layer or spatial indexes are created when you save a drawing. The indexes are used to improve performance during demand loading. Using indexes may slightly increase the time required to save a drawing. If a partially open drawing does not already contain spatial and layer indexes, this option is not available.

The file is saved with the specified file name. If the drawing is already named, the drawing is saved with the new file name. If you save the file as a drawing template, the Template Options dialog box is displayed, where you can provide a description for the template and set the units of measurement.

*Template Options Dialog Box* sets drawing template options.



## Навчальне видання

### **Launching AutoCAD. AutoCAD files and folders.**

**Guidance for laboratory works for “Informatics and computer modeling basics” course /for foreign students of 2nd year studying by orientation 6.060102 «Architecture»/**

Укладачі: Борис Петрович Бочаров,  
Ігор Леонідович Яковицький,  
Марія Юріївна Воєводіна,  
Юрій Володимирович Левіков

План 2009, поз.514 М

---

Підп. до друку 20.02.2009 р.                   Формат 60x84 1/16. Папір офісний  
Друк на ризографі                                   Обсяг 0,6 обл. - вид. арк.

---

61002, м. Харків, ХНАМГ, вул. Революції, 12

---

Сектор оперативної поліграфії ЦНІТ ХНАМГ.  
61002, м. Харків, вул. Революції, 12