Number of units 4	T 3	P 2	Th 1	Number of weekly hours	Annual System 30 weeks	Al-Esra'a University College Department: Engineering of Refrigeration and Air Conditioning Technologies
				Computer Applications		Second stage

Course Objective

Teaching the student, the operating system MS-DOS, using the visual basic programming language and its applications.

Week	Topic	Practical subject	Notes
1-2	Operating system commands (MS-DOS) — Using special commands, which include (DIR, CD, MD, RD, TREE, and PATH).	Personal computer and its accessories.	
3	Using the commands (DATA, TIME, VER, and CLS).	(MS —DOS) commands.	
4	Copying, displaying and deleting the files. COPY, XCOPY, TYPE, MORE, TREE, DEL.	Files and directory structure.	
5	Format, checking, and compare CDs, DISKOPY, DISKCOPMP, CHKDISK, FORMAT.	Applications on using different routes Path, Tree ,RD, MD, CD, DIR.	
6	Using status bar and subcommands.	Format, checking, and compare CDs, DISKOPY, DISKCOPMP, CHKDISK, FORMAT.	
7	Batches and executable files.	Batches and executable files.	
8	Basic language programming (general overview).	Basic language programming (general overview).	
9	Applications on drawings using (point, straight, circle).	Applications on drawings using (point, straight, circle).	
10-11	Drawing various geometric forms with addition of colors.	Drawing various geometric forms with addition of colors.	

12	Defining functions by (DEF).	Defining functions by (DEF).	
13	Defining and using various multi-lines functions, using (DEF, FNEND).	Defining and using various multi-lines functions, using (DEF, FNEND).	
14-15	Subprograms with applications.	Subprograms with applications.	
Half-year Break			
16-17	Defining matrixes by (DIM, MAT) with applications in using matrixes.	Defining matrixes by (DIM, MAT) with applications in using matrixes.	
18-21	Storing in random files .(close, write , an read file — open -close file)	Storing in random files .(close, write , an read file — open -close file)	
22-25	Storing in sequential file (delete file — write in a file -read and	Storing in sequential file (delete file — write in a file - read and	
26-30	Close file .Applications in related specialization.	Close file .Applications in related specialization.	