ECCC SYLLABUS

MODULE: **CS M2** COMPUTER GRAPHICS
LEVEL: INTERMEDIATE **(B)**

The exam covers all the material taught at basic level **(A)** together with the skills presented below.

COMPETENCE GROPUP		COMPETENCE WITHIN ECCC STANDRADS
1.	**The theory of computer graphics**	1.1. Types and division of graphics formats.
2.	**Creating and editing raster images**	2.1. Basic information related to the work area.
		2.2. Adjusting the interface and workspace: setting up a grid and guides, feature attraction.
		2.3. Creating and changing the selection parameters (the age, extension, narrowing smoothing).
		2.4. Operations on layers: aligning, combining merging, layers' styles).
		2.5. Color correction of the image: mixing channel, replacing colors).
		2.6. Painting and retouching the image, and applying filters: setting parameters of the brush, cloning tools, patch, red eyes; filters: blur, sharpen, distort.
		2.7. Creating and editing shapes and paths, and formatting, and texts distortion; half tone screening of vector shapes.
3.	**Creating and editing vector images**	3.1. Basic operations on files: import and export of the image.
		3.2. Adjusting the interface and workspace: guides and grid design and controlling their parameters.
		3.3. Working with Victor objects: selecting and editing the nodes, ready-made shapes library, line drawing, colors' palette, contours and filling.
		3.4. Operations on objects: a sequence of objects and the concept of layers, grouping and blocking, aligning, and deploying; transformation: the size and rotation.
		3.5. Entering and editing text: text formatting (paragraphs, and columns), converting the text to curves and its modification.
4.	**Preparing images for publication on the screen**	4.1. Breakdown of the image into smaller pieces (use of cutting tools).
		4.2. Publication of the image on the web: optimization of the graphics (adjusting the size, resolution and compression).
5.	**Printout from the printer and preparing graphics for print**	5.1. Printing images using the printer: setting the location, size and scale of the image on the site.
		5.2. Preparing graphics for print: exporting images to PDF format.
6.	**Batch processing - automation of the image**	6.1. Automatic rotation of the multiple images.
		6.2. Automatic change of many colorful images to grayscale mode.

Preferred programming environment for implementing the tasks of the basic level:
- Raster graphics: **Adobe Photoshop**, GIMP
- Vector graphics: **Adobe Illustrator**, CorelDRAW, Inkscape
- Batch processing: **IrfanView**

- multimedia and animations objects: **Adobe Photoshop (Image Ready)**