

Vector Graphics. Corel Draw
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The focus of this course - the use of modern information technologies in professional work. The program is designed for specialists using computer graphics in their work, and is a course of training and developing activities aimed at the development of skills and understanding of the principles for creating and editing images in vector graphics editor CorelDRAW.

Computer graphics are now largely replacing traditional forms of graphics in the work of specialists involved in the design of different directions. Ability to use graphics programs enriches the arsenal of expressive means of a designer, giving him the freedom of expression. Additionally, certain steps of industrial designers operations require precisely digital image for the following chain of product development.

CorelDRAW - one of the most popular vector graphics editor. Particularly active it is used by fashion designers, textile designers, interior designers, environmental facilities, industrial design experts. It is a versatile editor used to create your own fill and stroke, a variety of graphic effects including vector image processing and raster objects. The logical interface, ease of use, versatility makes it the best editor for the first steps to become familiar with computer graphics.

The structure of the online distance learning course includes video lectures and practical exercises and tests, respectively. The course aims to teach the basics of the problem, the subtleties and techniques of working with vector images. Each of the 18 topics making up the course has a video lecture and additional material PDF. For each topic there is a practical task or a test proposed.

The course involves training for creative solutions in future professional tasks using specific opportunities of this graphic program studied starting from elementary things and coming to more complex. The skills acquired during training include raster and vector images. The end result is a confident competent work using the means of the graphic editor. The course is prepared for students with little computer skills.

Full courses include the following 18 topics:

1. Features of raster and vector graphics. Introduction to Computer Graphics. The difference between vector and raster graphics. Explore what you can create using a vector image editor CorelDRAW. Test survey.

2. CorelDraw Interface. Graphic formats. Basics of the CorelDRAW. Menu overview of the program and the main features and interface settings. Description of the main vector and raster formats. Test survey.

3. The organization, distribution and transformation of objects. Studying ways to select the organization, and manage objects through the keypad, the main menu and the Object Manager docker. Actions with marked areas: scaling, rotation, distortion. Grouping objects and combining them into a compound path. Means of particular accuracy of objects organization. Activities.

4. Object Classes. Graphic primitives. The classification of objects in CorelDRAW. The characteristics and properties of the class graphics primitives. Using the possibilities of this class to create more complex graphic images. Activities.

5. Drawing and editing of curves. The curve design. Node types. Class of curved objects. Learn how to build and edit complex curvilinear forms. Theoretical aspects of the construction of the curve. The structure of the curve. Research and development of tools for curve fitting. Changing the geometry of an object using the editing tool. Activities.

6. Operations with the objects. Forming. Operations with objects: cohesion, exclusion, intersection, subtraction, etc. Performing operations with objects through the main menu and molding docker. Review of the practical use of these operations. Activities.

7. Tools to edit the shape of an object. Studying the support tools for distorting and editing facilities. Changing the geometry of an object using a tool for distortion. Reviewing and practical use of tools for cutting and erasing of curves. Separation of objects with a tool - knife. Removal of the object with the tool-eraser. Practical task.

8. Objects outlining. Editing the attributes of the curve: the thickness, style, type finalizers (for open curves), the type of tips (for open curves), angles, color. Reviewing dialog boxes to define the type of an outline. Creating and editing art circuit. Activities.

9. Methods and properties of filling pattern. Single color shading. Creating a user palette. Working with color. Color models. Basic color model (RGB, CMYK). Methods of dyeing of the objects. Ways to create and load custom palettes. Test survey.

10. Gradient. Filling the grid. Types of gradient filling. Editing of the properties of different types of gradient through a dialog box and interactively. Using a mesh fill to build complex filling. Activities.

11. Filling pattern, filling texture. Development of the user pattern. Two-color, bitmap and full-color pattern filling. Editing the properties of pattern fills. Creating custom patterns in different ways. Editing texture fillings. PostScript texture fill. Activities.

12. Special effects. Interactive overflowing. Interactive circuit. Using interactive spillover effects and interactive circuit. Edit their properties. Practical use of special effects and interactive interactive overflow circuit. Activities.

13. Interactive transparency. An interactive shell. Using the interactive effects of transparency and an interactive shell. Editing their properties. Practical use of the interactive effects of transparency and an interactive shell. Activities.

14. Interactive shadow. Interactive distortion. Using special effects and interactive online shade distortion. Editing their properties. Practical use of special effects and interactive online shadow of distortion. Activities.

15. Interactive squeezing. Lens. Using special effects and interactive squeezing the lens. Editing their properties. Practical use of the interactive effects of extrusion and lenses. Activities.

16. Block and artistic text. Editing and formatting of the text. Class text. Two types of Text class -block (simple) and literary. Editing features of these two classes. Application of block and a literary text. Test survey.

17. Text Effects. Placing text on a given path. Placement of the text within a container of any shape. Text Wrapping curves. Practical skills and techniques using combinations to create various text effects. Activities.

18. Spot Image. Screening and Tracing facilities. Masking point objects using Container. Importing raster editing raster images. Processing raster images into CorelDRAW. Screening facilities. Storing objects in raster formats. Tracing bitmaps. Using the Container. Activities.

For each topic, the learner has a short video lecture lasting from 8 to 10 minutes, a text and on-line testing.

A pilot version of the course includes topics 4, 5 and 9.

The courses are available on the educational portal EI "VSTU» (<http://sdo.vstu.by/login/index.php>).

To access the pilot course one must submit a request to the address UNITE.VSTU@mail.ru.

ДИСТАНЦИОННОЕ ОБУЧЕНИЕ

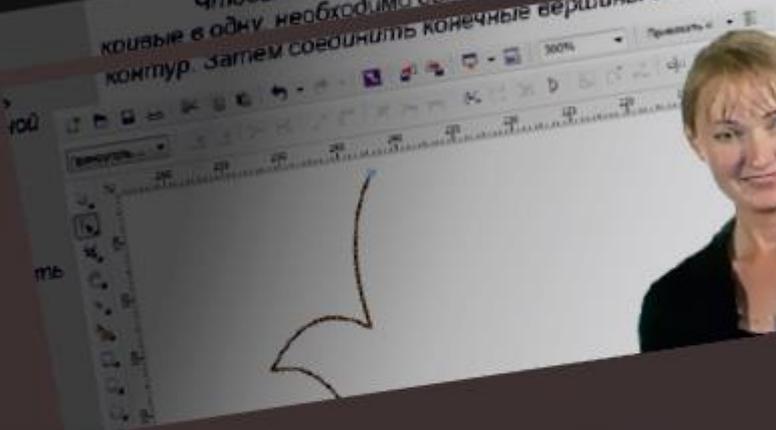
ВЕКТОРНАЯ ГРАФИКА СОБЕЛОВА

Задание 4

Задача для курсов студентов временного обучения
кругление, приведите изображение к виду:

Приемы построения

Чтобы соединить уже существующие **незамкнутые** контуры в один, необходимо выделить их и создать составной контур. Затем соединить конечные вершины в одну.



для получения бесплатного доступа к материалам пилотного курса необходимо направить заявку на адрес unite.vstu@mail.ru, указав следующие данные:

1. ФАМИЛИЯ, ИМЯ, ОТЧЕСТВО
2. МЕСТО РАБОТЫ
3. ДОЛЖНОСТЬ
4. КОНТАКТНЫЙ ТЕЛЕФОН
5. АДРЕС ЭЛЕКТРОННОЙ ПОЧТЫ
6. НАИМЕНОВАНИЕ ЗАИНТЕРЕСОВАВШЕГО КУРСА

ПРОГРАММА КУРСА:

1. Особенности растровой и векторной графики.
2. Интерфейс CorelDraw. Графические форматы.
3. Организация, распределение и трансформирование объектов.
4. Классы объектов. Графические примитивы.*
5. Рисование и редактирование кривых. Конструкция кривой. Типы узлов.*
6. Операции с объектами. Формовка.
7. Инструменты для редактирования формы объектов.
8. Обводка контуров объектов.
9. Способы и свойства заливки. Одноцветная заливка. Создание пользовательской палитры. Цветовые стили.*
10. Градиент. Заливка сетки.
11. Заливка узором, текстурой. Разработка пользовательского узора.
12. Специальные эффекты. Интерактивное перетекание. Интерактивный контур.
13. Интерактивная прозрачность. Интерактивная оболочка.
14. Интерактивная тень. Интерактивное искажение.
15. Интерактивное выдавливание. Линза.
16. Блочный и художественный текст. Редактирование и форматирование текста.
17. Растрирование и трассировка объектов.
18. Точечные изображения. Маскирование точечных объектов с использованием Контейнера.

* - темы, доступные в пилотных курсах

Абрамович Наталья Анатольевна, доцент



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