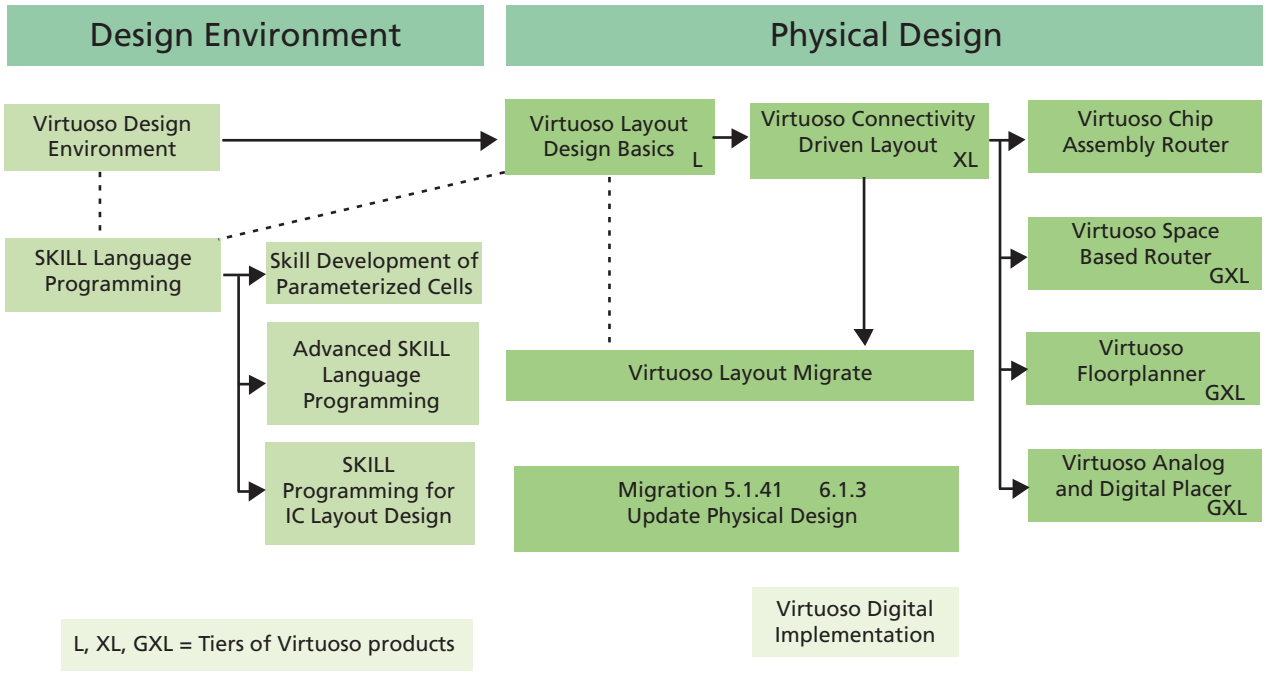
EDUCATION SERVICES

EMEA TRAINING

A direct path to increased productivity

Cadence® Education Services can help you get the most out of your investment. With its innovative and hands-on course content, state-of-the-art training centers, 200+ certified instructors, and a variety of learning modes (instructor-led, self-paced, and virtual), Cadence® Education Services helps customers become proficient with Cadence software, EDA languages and design methodologies, quickly and cost-effectively.

VIRTUOSO CUSTOM IC DESIGN BACK END COURSES



VIRTUOSO DESIGN ENVIRONMENT

This three day course is created for CAD managers, CAD engineers and those design engineers needing a working knowledge of the primary aspects of the Virtuoso Design Environment. Key aspects of this course include the following sections: enhanced Command Interpreter Window, improved Cadence Help, detailed OpenAccess, design cockpit with assistants, SourceLink and self-help information, PDK including generic PDK, library including information about ITDB (Incremental Technology Data Base), technology file including information about DEFT (Design Environment for Techfiles), customization including graphics export, cdsCopy.

SKILL LANGUAGE PROGRAMMING

This five day course provides the foundation, concepts, and sample programs to build working SKILL® programs. It stresses the important SKILL functions that underlie the Cadence® Virtuoso® Design Environment. For each major group of SKILL functions, you complete a working program. The course also covers new database objects, new user interface features, and the latest information about accessing example programs using SourceLink® online customer support.

SKILL DEVELOPMENT OF PARAMETERIZED CELLS

This two day course describes the tools and methods of developing parameterized cells (pcells) in SKILL, the Cadence Design Framework II extension language. A major portion of the course is dedicated to an introduction and investigation of relative object design (ROD), a new technology providing powerful, flexible procedures for defining simple and complex layout objects and their relationships to each other. Based upon a firm foundation in relative object design, pcell development will be explained in stages, beginning with creation of sizeable transistors and evolving into a fully parameterized inverter layout.

ADVANCED SKILL LANGUAGE PROGRAMMING

This three day course is designed for Experienced SKILL programmers who want to develop or maintain complex SKILL applications by using modern software engineering techniques to modularize program code. You will focus on the lexical scoping and object-oriented extensions to the SKILL language known as the SKILL++ language. You will learn to apply procedural interfaces and object-oriented methodologies to modularize hybrid SKILL and SKILL++ applications.

VIRTUOSO LAYOUT DESIGN BASICS

This two day course covers the basic techniques for working with designs in the Virtuoso® Layout Suite L environment. You will learn to create and edit cell-level designs and to create and place instances to build hierarchy for custom physical designs. The course also covers design-rule-driven (DRD) editing, the editing functionality that provides real-time feedback as you create and edit shapes.

VIRTUOSO LAYOUT MIGRATE

In this three day course, you explore how to perform process and design-rule migration of layout designs. You will migrate designs from a current process technology to a new process technology using an interface integrated into the Virtuoso® layout environment. In addition, you will learn the techniques for migrating designs containing parameterized cells while maintaining hierarchy. After completing this course, you will be able to implement preferred rules to improve yield and performance.

VIRTUOSO CONNECTIVITY DRIVEN LAYOUT

This two day course is designed for developers who create designs for analog or digital ICs. You will use typical design examples of integrated circuit layout to explore schematic-driven layout techniques. Virtuoso® Layout Suite XL has many features which can assist you with generating a connectivity-driven layout. You will gain a working knowledge of Layout XL in the physical design environment.

VIRTUOSO CHIP ASSEMBLY ROUTER

This course explores the basic design flow for device-level and chip-level routing with Virtuoso® Chip Assembly Router. You will focus on methods of solving typical problems while routing a top-level block design. The primary audience of this three day class includes experienced chip assembly users who are interested in improving block and chip assembly routing techniques for their design flows.

VIRTUOSO SPACE BASED ROUTER

In this one day course, you will use typical design examples of CMOS circuits to explore and understand the usage and routing techniques of the Virtuoso® Space-Based Router. The router has many features, including the Process Rules Editor, which further enhances and augments the power of the interactive and automatic routers.

VIRTUOSO FLOORPLANNER

This is an advanced Engineer Explorer course. Upon finishing this one-day course, you will be able to create a top-level floorplan. You will use the floorplanner to calculate the area required for the top-level boundary and the top-level blocks. You will place the I/O pads and then generate and place the top-level blocks. Some of the blocks will be existing blocks and some will be calculated for their area. You will also do a top-level floorplan without using the existing layout, so you can see how to calculate the area and then modify the blocks to fit in a specific top-level boundary.

VIRTUOSO DIGITAL IMPLEMENTATION

The Virtuoso® Digital Implementation system consists of capacity-limited versions of Encounter® RTL Compiler with global synthesis technology and the SoC Encounter™ L netlist-to-GDSII system. In this course, you run the Virtuoso Digital Implementation system to synthesize an RTL netlist. You also run design planning, placement, clock tree synthesis, timing optimization, and routing on a flat design. This course uses standard cells and custom blocks to illustrate the features of the Virtuoso Digital Implementation Option.

If you have any questions or would like assistance in selecting a program tailored to your needs and interests, please contact us at

eur_training@cadence.com

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