

# 1. PUBLISHABLE SUMMARY

The objective of the IDESA Support Action is to develop and make available didactic training material on the design flow for integrated circuits for advanced deep sub-micron technologies, free of intellectual property rights, for the benefit of European academia.

The IDESA project addresses training of academic staff (professors, assistant professors and lecturers) from all interested European academia. New didactic material that will be made available for reuse in the course portfolio of bachelor and master engineering curricula was developed. Training is organised in class-based hands-on sessions and advanced seminars using state-of-the-art multimedia technology over the web or on DVD.

- **4 different advanced implementation courses** will tour different sites in Europe. These courses are hands-on courses using a train-the-trainer philosophy. Each of these courses will be repeated 7 times, to reach a significant proportion of the 600+ European academia. All of these courses address the advanced implementation issues relating to the 90 nm nodes initially. This will bring the universities to a more advanced level of implementation skills to start engaging in 65- and 45-nm issues.

The first sessions of the courses have been organised and were attended by representatives from over 40 different academia. These are:

- Advanced analog implementation flow – session in June
- Advanced RF implementation flow – session in May
- Advanced digital physical implementation flow – session in October and November
- Design-for-manufacturing – session in May and November

The following sessions have been announced:

- Advanced analog implementation flow – session in December and January 2009
  - Advanced RF implementation flow – session in December and February + March 2009
  - Advanced digital physical implementation flow – session in February 2009
  - Design-for-manufacturing – session in May 2009
- The consortium will build a portfolio of **public domain didactic seminars**, addressing issues that are not addressed in the design flow courses but that will start to be of dominant importance for the 65 and 45 nm generation design flows. The availability of 8 seminars was announced to the academic public.
  - This seminar portfolio will be **supplemented with fully documented didactic lab exercise-material** that can be reused free of intellectual property rights in the curricula of European engineering students. The goal is to cover 32 topics in this portfolio, during the 2 years duration of the project. Progress on this activity is below expectation. Only few lab exercises have been announced by the lecturers.

A Program Board consisting of representatives of the industry (both IDM and EDA) and of the Education and Training Working Group (ETWG) of ENIAC has been set up. The Program Board helps defining the content of the 65- and 45-nm seminar portfolio and advises on how to best guide the transition from a 90-nm focus to a 65- and 45-nm.

The project website is available on [www.idesa-training.org](http://www.idesa-training.org)