An Exploration on Competency-Based Curricula in Integrated Circuit Design

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Abstract : In this paper, the relationships between professional competences and school curricula in IC design industry are explored. The semi-structured questionnaire survey and focus group interview is the research method. Study participants are graduates of microelectronics engineering professional departments who are currently employed in the IC industry. The IC industries are defined as the electronic component manufacturing industry and optical-electronic component manufacturing industry in the semiconductor industry and optical-electronic material devices, respectively. Study participants selected from IC design industry include IC engineering and electronic & semiconductor engineering. The human training with IC design professional competence in microelectronics engineering professional departments is explored in this research. IC professional competences of human resources in the IC design industry include general intelligence and professional intelligence.

Keywords : IC design, curricula, competence, task, duty
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