

**Informatics education in Europe:
institutions, degrees, students, positions, salaries
Key Data 2008-2012**

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ABOUT THIS REPORT

“**Informatics Education in Europe: Institutions, Degrees, Students, Positions, Salaries — Key Data 2008-2012**” is the first comprehensive attempt to document the state of higher education in informatics (computer science) in Europe. Based on information from representative countries, it presents a wealth of fundamental data, starting from a list of institutions awarding degrees in the field and continuing with student enrollments, degrees awarded with gender information, academic titles, as well as precise and much-needed data about academic salaries across European countries.

The picture presented here is a snapshot of the informatics situation in the period 2008-2012. It will be regularly updated and extended to continue providing the European Informatics community with a clear picture of the key academic and economic parameters defining its situation and evolution.

This survey is the latest in a set of influential reports published by Informatics Europe:

- *The Role and Relevance of Experimentation in Informatics* (2013, eds. Jan van Leeuwen and Viola Schiaffonati).
- *Informatics Doctorates in Europe — Some Facts and Figures* (2013, ed. Manfred Nagl).
- *Informatics Education in Europe: Europe Cannot Afford to Miss the Boat* (2013, joint report with ACM Europe, ed. Walter Gander).
- *Research Evaluation for Computer Science* (2008, eds. Bertrand Meyer, Christine Choppy, Jan van Leeuwen and Jørgen Staunstrup).
- *Student Enrollment and Image of the Informatics Discipline* (2007, eds. Jan van Leeuwen and Letizia Tanca).

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Acknowledgements: *for invaluable help in obtaining and interpreting country-specific data, the authors are particularly indebted to: Antoine Petit (France), Manfred Nagl and Hans-Ulrich Heiss (Germany), Enrico Nardelli and Carlo Ghezzi (Italy) and Jan van Leeuwen (Netherlands).*

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Executive Summary

Informatics, the science behind IT, may be the most important key to the future economic success in Europe. Crucial to that success is the availability of superb informatics education throughout Europe.

In this report, the first to attempt a general study of the state of the art in European informatics education, the emphasis is on raw facts and figures rather than deep analysis; it provides the material for such analyses as others may wish to perform. Still, a number of salient points emerge.

- The field in Europe suffers from a **serious branding problem**. Even after an approximate translation to English, a good dozen terms are used to denote what is fundamentally the same discipline.
- The quantity and quality of available data varies considerably from country to country. In the interest of reliability, this report has mostly used data from countries where a solid and reasonably complete picture could be drawn from official sources. Even when available, the data does not always¹ allow direct comparisons, since the methods of collection vary significantly from country to country. It is important for the field to ensure that **consistent, solid informatics education data becomes available in all European countries**.
- Informatics is a well-developed academic field, with **hundreds of accredited institutions** training huge numbers of students for bachelor, master and PhD degrees.
- Extrapolating from precise data in specific countries, limited to universities, we come to a rough estimate that **over half a million students are enrolled in informatics bachelor's programs** across Europe.
- The corresponding **estimated figure for master's programs is close to 200,000**.
- The **status of faculty** varies considerably across Europe.
- **The salaries vary even more**. Our detailed study of the exact salaries of faculty in four of the most advanced economies in Europe (Germany, Italy, Netherlands, Switzerland) shows **the ratio of maximum to minimum is about a factor of three**. For example a full professor at the top level receives, in some countries, the salary of a high-level industry executive, whereas in others the compensation is more comparable to that of a junior engineer in the IT industry.

¹ Here and in the rest of this report we follow the IT industry's practice of using "data" as a singular noun.