



IG



The IG specialization is a Master's-level program that trains engineers with dual skills in computer science and management. This program opens doors for graduates to access management functions related to designing information systems, developing applications, and managing information technology projects.

**KEYWORDS**

**DATABASES**  
**INFORMATION SYSTEM DESIGN**  
**SOFTWARE ENGINEERING**  
**PROJECT MANAGEMENT**  
**ORGANIZATIONAL MANAGEMENT**  
**COMPUTER SCIENCE - MANAGEMENT**  
**WEB TECHNOLOGIES AND APPLICATIONS**  
**DECISION-SUPPORT SYSTEMS**

**ALL POLYTECH PROGRAMS  
 LEVERAGE A SOLID PARTNERSHIP  
 NETWORK WITH:**

- the industrial world (800 internships, 200 industry projects, and 50 apprenticeship contracts per year)
- academic research (14 associated research laboratories)
- international partners (over 100 partner universities around the world)

**WORKING INTERNATIONALLY**

The IG department prepares its engineering students for careers in an international context:

- several courses taught in English
- stays abroad as internships or semesters at universities...

 **TARGET PROFESSIONS**
**When IG engineering students graduate:**

- they have acquired strong scientific bases in informatics, decisional mathematics, statistics, project management methodology.
- they have acquired the capabilities and skills of business professions and corporate management issues.
- they are able to lead computer-related projects from design to production.
- they are familiar with team management, sustainable development issues, corporate social responsibility, and business creation.

**Graduates are qualified for many jobs:**

- Information System Designer and Architect
- Computer-related Project Manager
- Web and Mobile application Designer and Developer
- Information Systems Consultant
- Functional Analyst
- Database Expert
- Information System Auditor
- R&D Engineer

 **TARGET ACTIVITY SECTORS**

- Computer engineering and service companies
- Information system departments (large companies)
- IT startups
- Large banking and insurance companies
- Large companies involved with decision-making (audit, consulting)
- Software developers
- Public service organizations and local governments

## MAIN PROGRAM TOPICS

- information system design and analysis
- software engineering
- databases
- imperative and object-oriented programming languages
- mobile and web application development
- organizational, economic, and accounting system management
- decisional mathematics and statistics
- project management
- modern languages

A complete list of courses offered at POLYTECH, and total hours, is available on [www.polytech-montpellier.fr](http://www.polytech-montpellier.fr)

## PROJECTS AND INTERNSHIPS

Engineering students participate in several internships with companies or research laboratories:

- 1 month internship at the end of the 3<sup>rd</sup> year
- 3-4 months internship at the end of the 4<sup>th</sup> year
- 5-6 months internship at the end of the 5<sup>th</sup> year

4<sup>th</sup> and 5<sup>th</sup> year students carry out an industrial project at the end of their studies (300 hours), which places them in a professional context and helps them gain autonomy and independence.

## "IG" GRADUATES

Fabienne Amadori, CEO, Isiasoft (IG 2005)

Pierre Filippi, Functional Validation Manager, SFR (IG 1990)

Patrice Prut, Founder and CEO, PC Soft (IG 1984)

## ADMISSION

### 3<sup>rd</sup> year

→ For students in preparatory classes at higher education establishments: recruitment via Polytech competition.

→ For holders of L2, L3, DUT, BTS, or equivalent foreign diploma: competition via written application and interview.

→ For PeiP2 students (Polytech engineering schools program): after curriculum validation and national ranking.

### 4<sup>th</sup> year

For holders of an M1 degree or equivalent foreign degree: competition via written application and interview.

### Vocational contracts

Students accepted to initial education may complete their 5<sup>th</sup> year with a vocational contract.

### Continuing education

The Computer Science and Management program is also available as continuing education under some conditions, for employees who can demonstrate at least three years of professional experience related to this specialization.

### LATEST-GENERATION HI-TECH EQUIPMENT

*The IG department has four rooms dedicated to practicals and personal projects. Students benefit from equipment that reflects all of the computing environments in today's market, including: Windows, Mac, iOS, Android, Unix servers, access to the HPC@LR high-performance calculation center, tablets, laptops, desktop computers, and more.*

### TWO OPTIONS IN 5<sup>TH</sup> YEAR

- Internet of Things
- Enterprise solutions

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## TO FIND OUT MORE +

More information regarding the number of ECTS, course descriptions, research partnerships, and international opportunities on: [www.polytech-montpellier.fr](http://www.polytech-montpellier.fr).



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