

**SALONE DELL'ORIENTAMENTO 2025**

**#TOMORROW STARTS TODAY**

**CORSO DI LAUREA MAGISTRALE**

# **INGEGNERIA INFORMATICA**

## ***COMPUTER ENGINEERING***

# **Software path**

Marco Torchiano



**Politecnico  
di Torino**

**SCOPRI TUTTI I  
CORSI DI STUDIO  
A.A. 2025/26  
[www.polito.it](http://www.polito.it)**



# Objectives

- Provide the instruments to **manage** software development
  - Technologies
  - Processes
- Transversal knowledge and skills

# Key Courses

- **Software Engineering I (new)**
  - Software development life cycle
- **Information Systems**
  - Support business processes in organizations
  - Analysis of needs
- **Software Design and Architecture (new)**
  - Design and Architecture of Software systems
- **Formal Languages and Compilers**
  - Definition and Parsing of formal languages
- **Software Engineering 2**
  - Management of a software development project
  - Agile methods (Scrum)

# Software vs. other (closer) paths

	Software	AI & DA	Comp. & Net Infrastr.	Grafica & Multimedia
1 <sup>st</sup> Year	Computer Architectures	Computer Architectures	Computer Architectures	Computer Architectures
	Data Science & Db Tech	Data Science & Db Tech	Data Science & Db Tech	Data Science & Db Tech
	Computer Network Techs & Services	Computer Network Techs & Services	Internet Architecture and Techs	Computer Network Techs & Services
	<b>Software Engineering I</b>	<b>Big Data Proc. &amp; Analytics</b>	<b>Cloud Computing Techs</b>	<b>Computer Graphics</b>
	Information Systems	Software Engineering	Software Engineering	Software Engineering
	Wep App I	Web App I	Web App I	Image Processing and Vision
	Sys & device programming	Sys & device programming	Sys & device programming	Sys & device programming
	<b>Formal Languages/Sw Design &amp; Archi</b>	<b>ML &amp; Pattern Recognition</b>	<b>Enterprise Networks</b>	<b>Computer Animation</b>
2 <sup>nd</sup> Year	IS Security	IS Security	IS Security	ML for vision and multimedia
	<b>Software Engineering 2</b>	<b>Advanced ML</b>	<b>Software Networking</b>	<b>Virtual and augmented reality</b>
	Choice 1	Choice 1	Choice 1	Choice 1
	Free credits	Free credits	Free credits	Free credits
	Choice 2	Choice 2	Choice 2	Choice 2
	Thesis/stage	Thesis/stage	Thesis/stage	Thesis/stage

# Optional Courses

- **Human Computer Interaction**
- **Distributed systems programming**
- **Mobile application development**
- **Web Applications II**
- **Cloud Programming and Operations (**new**)**
- **Large Language Models for Software Engineering (**new**)**

... plus many others!

# Software Engineer

- Define
- Design
- Develop
- Verify
- Release
- Maintain



## **Software**

- Negotiate
- Estimate
- Plan
- Control

# Possible outcomes

- **System analyst**
  - Understanding an organization's needs, formalizing them and identifying suitable solutions from technological and architectural perspectives
- **Software engineer**
  - Designing in detail specific solutions, select the appropriate tools and techniques and develop them
- **Software architect**
  - Designing the overall architecture of a large software-based system
- **Software quality engineer**
  - Organizing the quality assurance processes (testing, reviews, code quality, etc.)
- **Software project manager**
  - Managing a team of developers to produce software systems

# Management

- How **not** to manage a software project (company)
- From Elon's teachable moments collection



Esther Crawford ✨🔵 @esthercrawford · 2 nov

When your team is pushing round the clock to make deadlines sometimes you [#SleepWhereYouWork](#)



Evan Jones 🔵 @evanstnlyjones · 2 nov

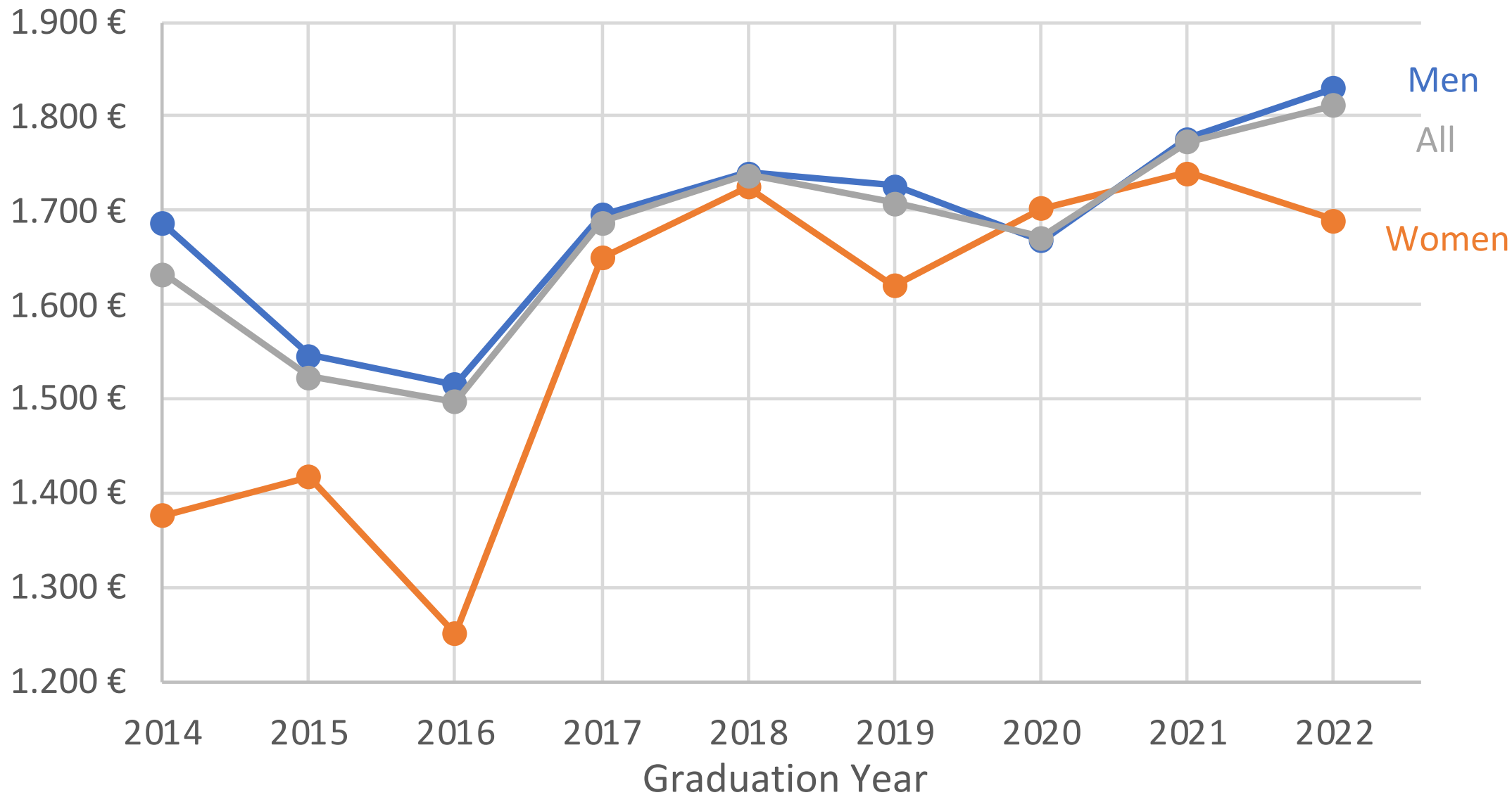
When you need something from your boss at elon twitter





# Net Salary 1 Year after graduation

Computer Engineering Graduates from Politecnico di Torino



# Net Salary 3 Years after graduation

Computer Engineering Graduates from Politecnico di Torino

