

Career presentation for IT Managers / Engineers

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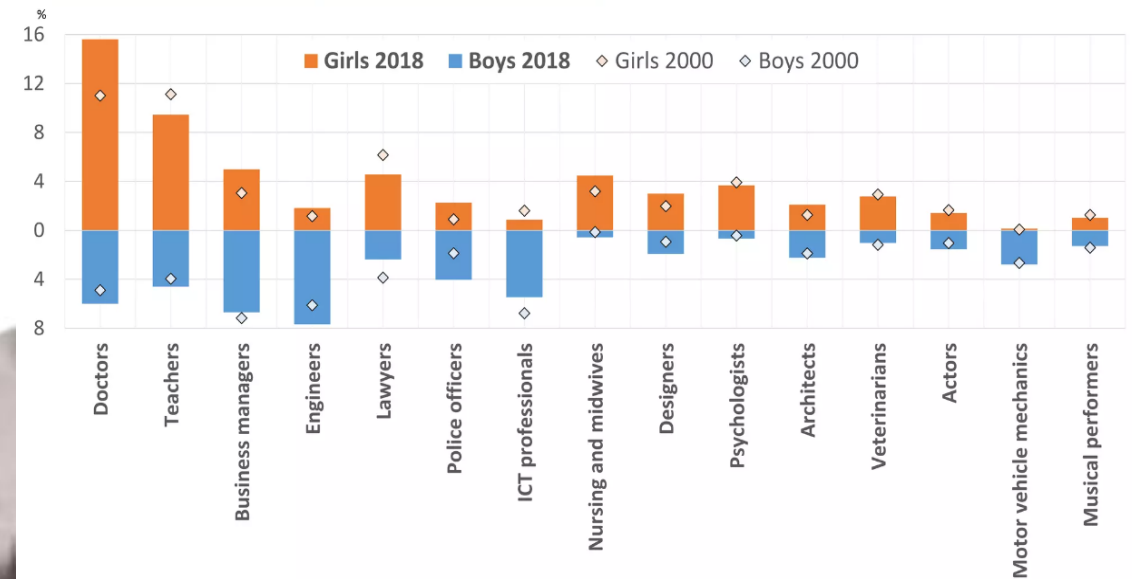
EEB3 CAREER FAIR, MARCH 2023



Career selection criteria



The fifteen most common occupational expectations among 15-year-olds



Ref: OECD Programme for International Student Assessment (PISA)

IT & Computer Engineering paths



Computer Science

Students will be exposed to areas such as:

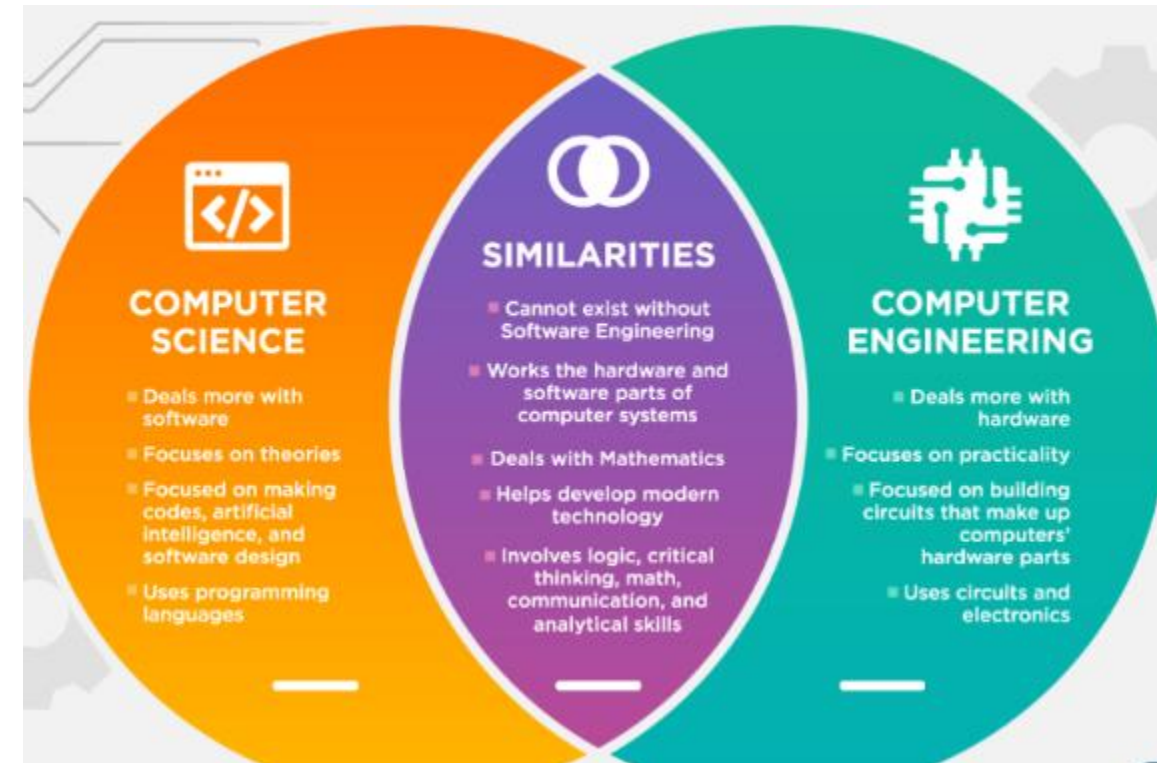
1. Algorithms and complexity
2. Architecture and organization
3. Computational science
4. Discrete structures
5. Graphics and visualization
6. Human-computer interaction
7. Information assurance and security
8. Information management
9. Intelligent systems
10. Networking and communications



Software Engineering

Students will be exposed to areas such as:

1. Computing essentials
2. Mathematical & Engineering fundamentals
3. Professional practice
4. Software modeling and analysis
5. Requirements analysis and specification
6. Software design
7. Software verification and validation
8. Software process
9. Software quality and security



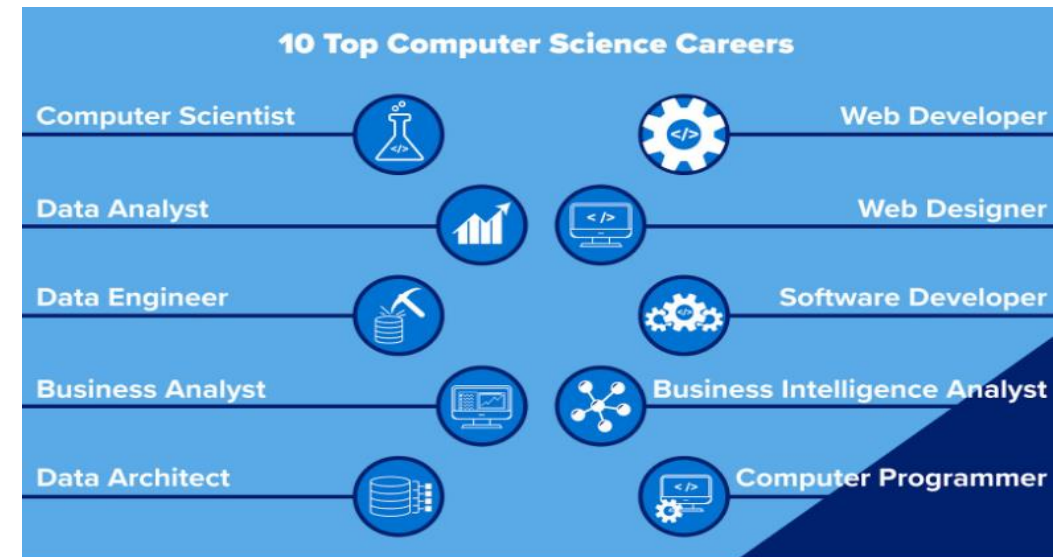
IT & Computer Engineering career fields

- **Software engineering:** Duties include creating, maintaining, and updating software
- **Hardware engineering:** Main task to create new hardware technologies and computers
- **Electrical engineering:** Telecommunication, electrical design engineering, instrumentation engineering, and micro-electrical engineering are other possible specialties
- **Network engineering:** Field Engineer, Network specialist, Network architect

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SOURCE: ZIPPJA.COM

BEST COMPUTER ENGINEERING JOBS

<ul style="list-style-type: none">• Business Analyst• Sales Engineer• Application Engineer• Software Engineer• Information Technology Internship• Junior Software Engineer• Software Developer• Electrical Engineer• Research Internship• Information Technology Consultant• Software Development Engineer• Systems Administrator• Senior Software Engineer• Network Technician• Web Developer• Design Engineer• Electrical Engineer Internship• Applications Developer• Junior Software Developer• Junior .NET Developer	<ul style="list-style-type: none">• Research And Development Internship• Test Engineer• Systems Analyst• Software Test Engineer• Computer Engineer• Engineering Internship• Hardware Engineer• Engineer• Junior Developer• Senior Systems Engineer• Quality Assurance Engineer• Software Developer Internship• Software Engineering Internship• Systems Engineer• Project Engineer• Computer Programmer	<ul style="list-style-type: none">• Programmer• Information Technology Specialist• Embedded Software Engineer• Technical Internship• Project Coordinator• Embedded Engineer• Pre Sales Engineer• Student Internship• Technical Support Specialist• Java Developer• Computer Technician• Front End Developer• Data Analyst• Data Scientist
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Required skills for IT & Computer Engineering

- Strong background in Maths
- Intimate understanding of the way technology works
- An eye for detail and a good deal of concentration
- Analytical skills
- Strong problem-solving skills
- Good communication skills
- Good team player
- [Be an Expert](#)

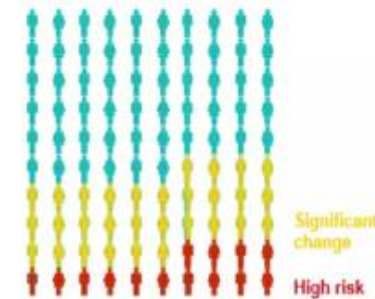
IT & Computer Engineering challenges

- Digital revolution (1980)
- Digital transformation & continuous innovation
- Digitalization and intelligent automation (chatGPT, ML)
- Increase in remote working and/or collaboration tools
- Increasing demand for online purchasing/services
- Increasing migration to the cloud

With the labour market undergoing rapid, fundamental change – decision-making is more important, but also more difficult.



Jobs are at risk of automation



New forms of work are emerging



