Career presentation for IT Managers / Engineers

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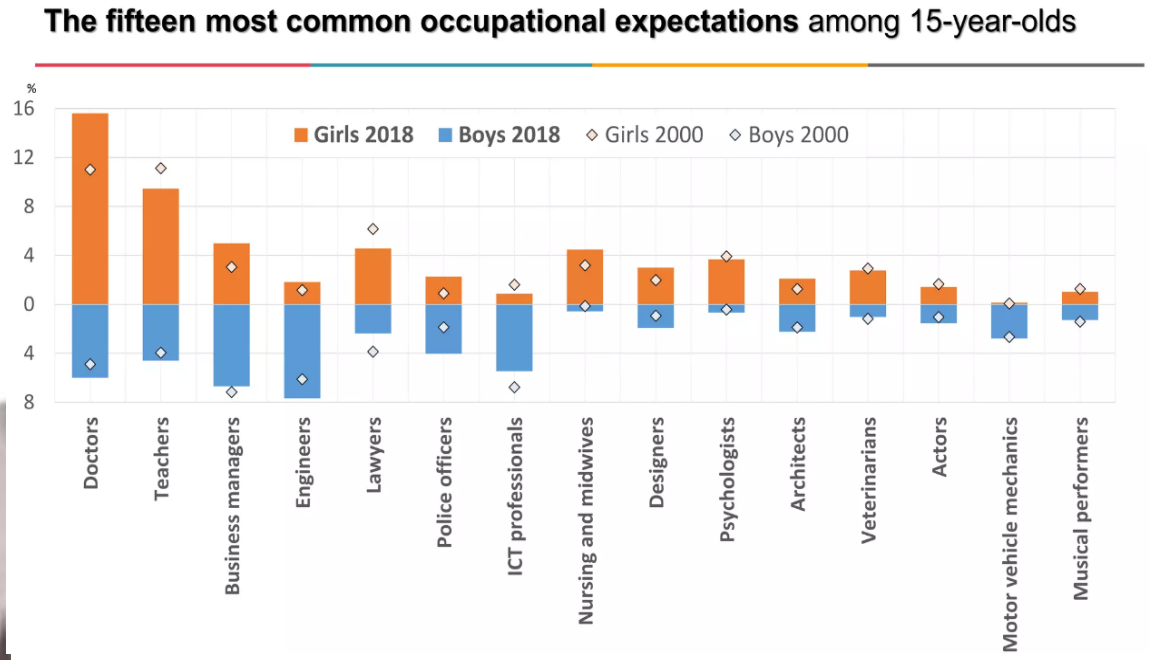
EEB3 CAREER FAIR, MARCH 2023

Career selection criteria



Ref: OECD Programme for International Student Assessment (PISA)

IT & Computer Engineering paths

Computer Science

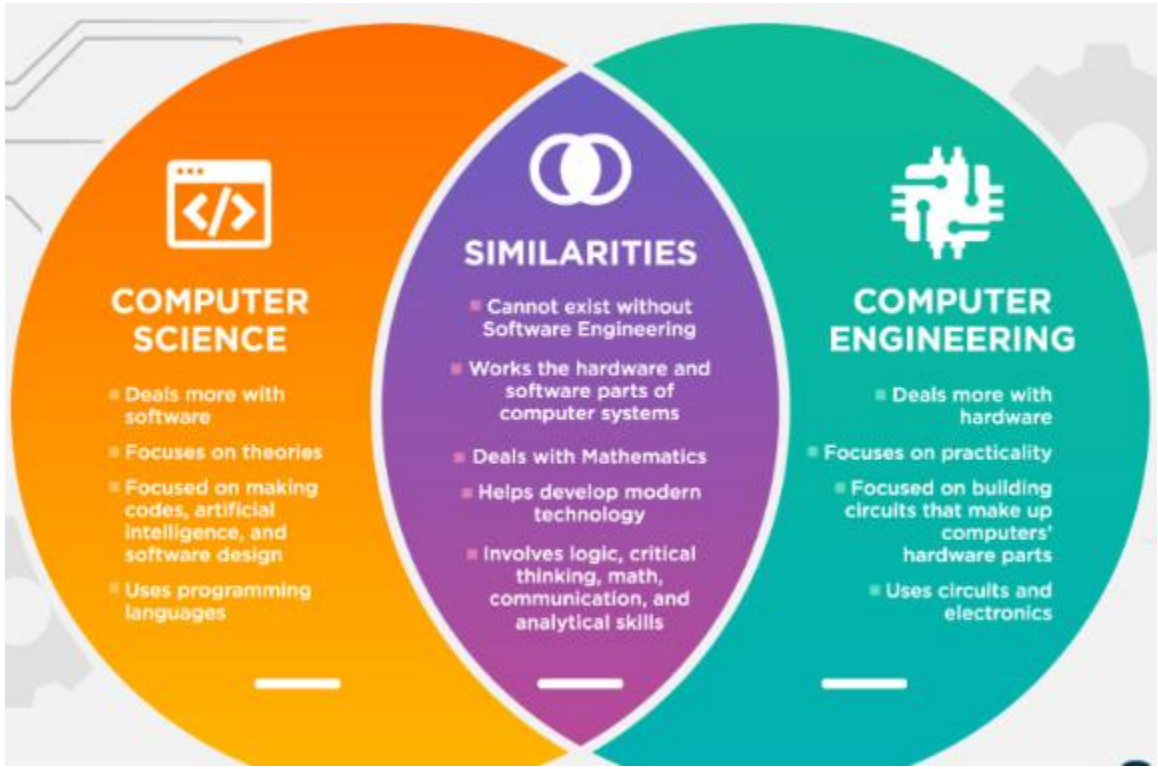
Students will be exposed to areas such as:

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

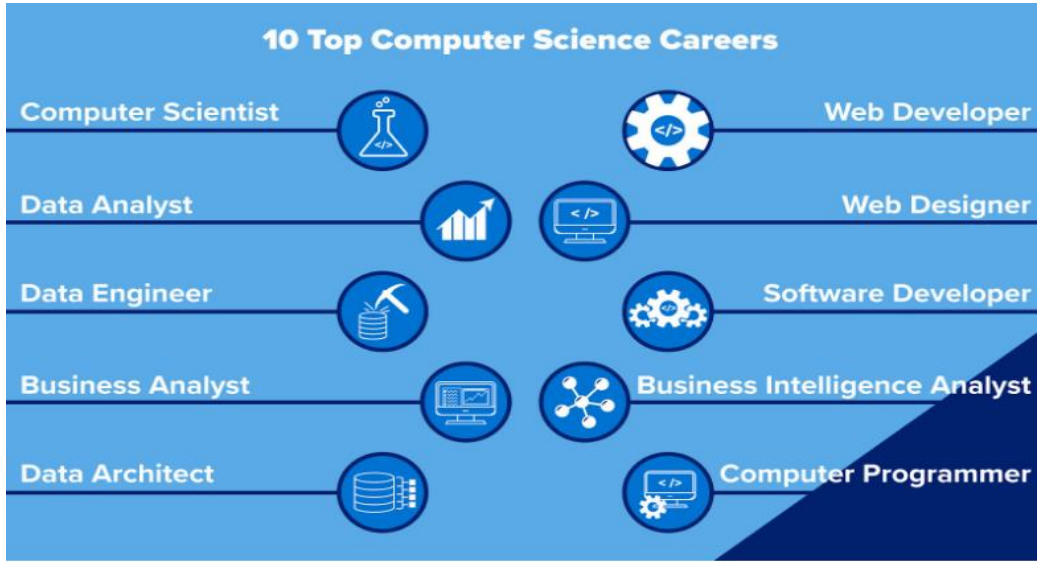
Students will be exposed to areas such as:

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

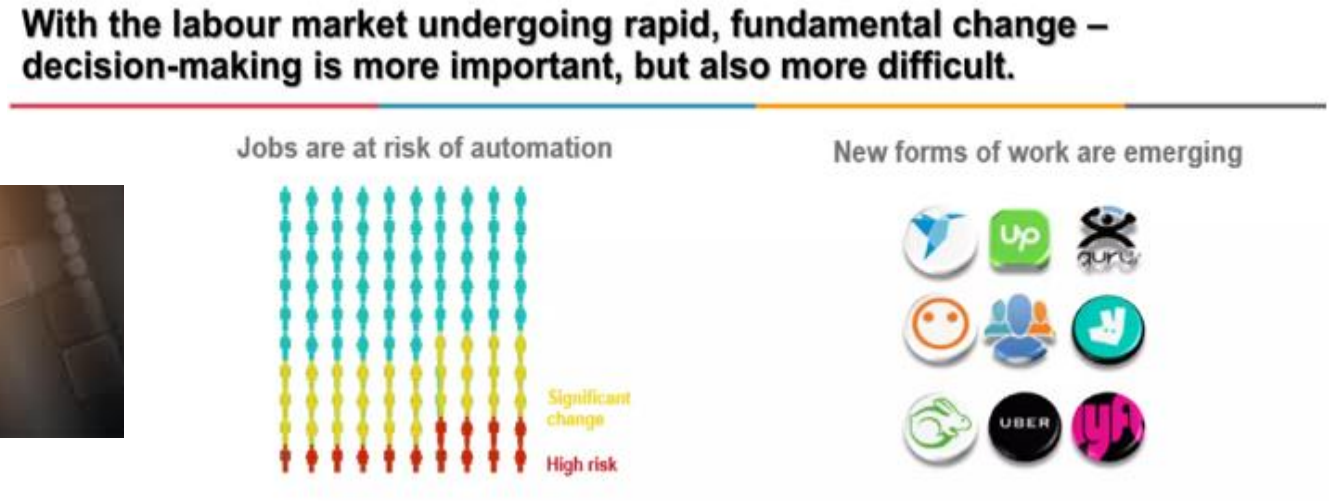


Required skills for IT & Computer Engineering

- 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



Any Questions