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# Communication and Computer Engineering (CCE)

## Cairo University Faculty of Engineering



# Overview

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- ❑ **What is CCE?**
- ❑ **What do CCEs do?**
- ❑ **Why CCE?**
- ❑ **What do CCEs learn?**
- ❑ **What careers await CCE graduates?**



# What is CCE?

**CCE** Engineers are inventors and innovators who apply knowledge of hardware circuits, computer software and systems to develop technologies to improve people's lives



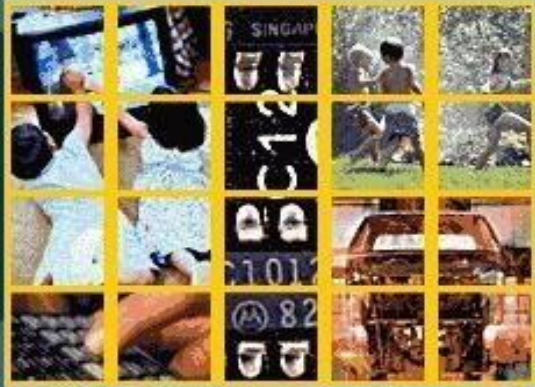
# What is CCE?

## Greatest Engineering Achievements OF THE 20<sup>TH</sup> CENTURY

[About](#)   [Timeline](#)   [The Book](#)

**Welcome!**  
How many of the 20th century's greatest engineering achievements will you use today? A car? Computer? Telephone? Explore our list of the top 20 achievements and learn how engineering shaped a century and changed the world.

<ol style="list-style-type: none"> <li>1. Electrification</li> <li>2. Automobile</li> <li>3. Airplane</li> <li>4. Water Supply and Distribution</li> <li>5. Electronics</li> <li>6. Radio and Television</li> <li>7. Agricultural Mechanization</li> <li>8. Computers</li> <li>9. Telephone</li> <li>10. Air Conditioning and Refrigeration</li> </ol>	<ol style="list-style-type: none"> <li>11. Highways</li> <li>12. Spacecraft</li> <li>13. Internet</li> <li>14. Imaging</li> <li>15. Household Appliances</li> <li>16. Health Technologies</li> <li>17. Petroleum and Petrochemical Technologies</li> <li>18. Laser and Fiber Optics</li> <li>19. Nuclear Technologies</li> <li>20. High-performance Materials</li> </ol>
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CCE

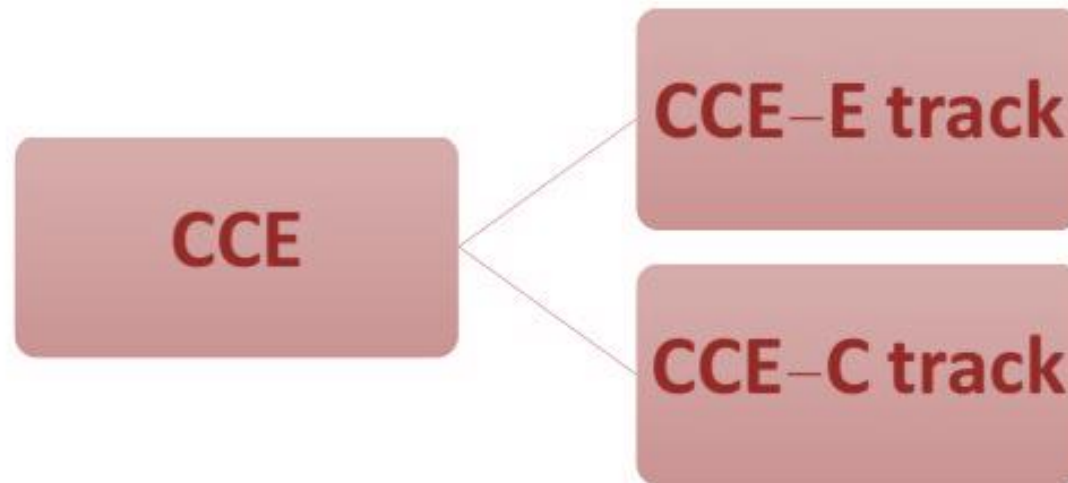
Tremendous impact on the world

# CCE Tracks

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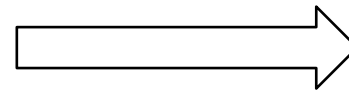
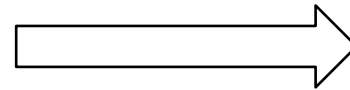


## Communication and Computer Engineering



# What do CCEs do?

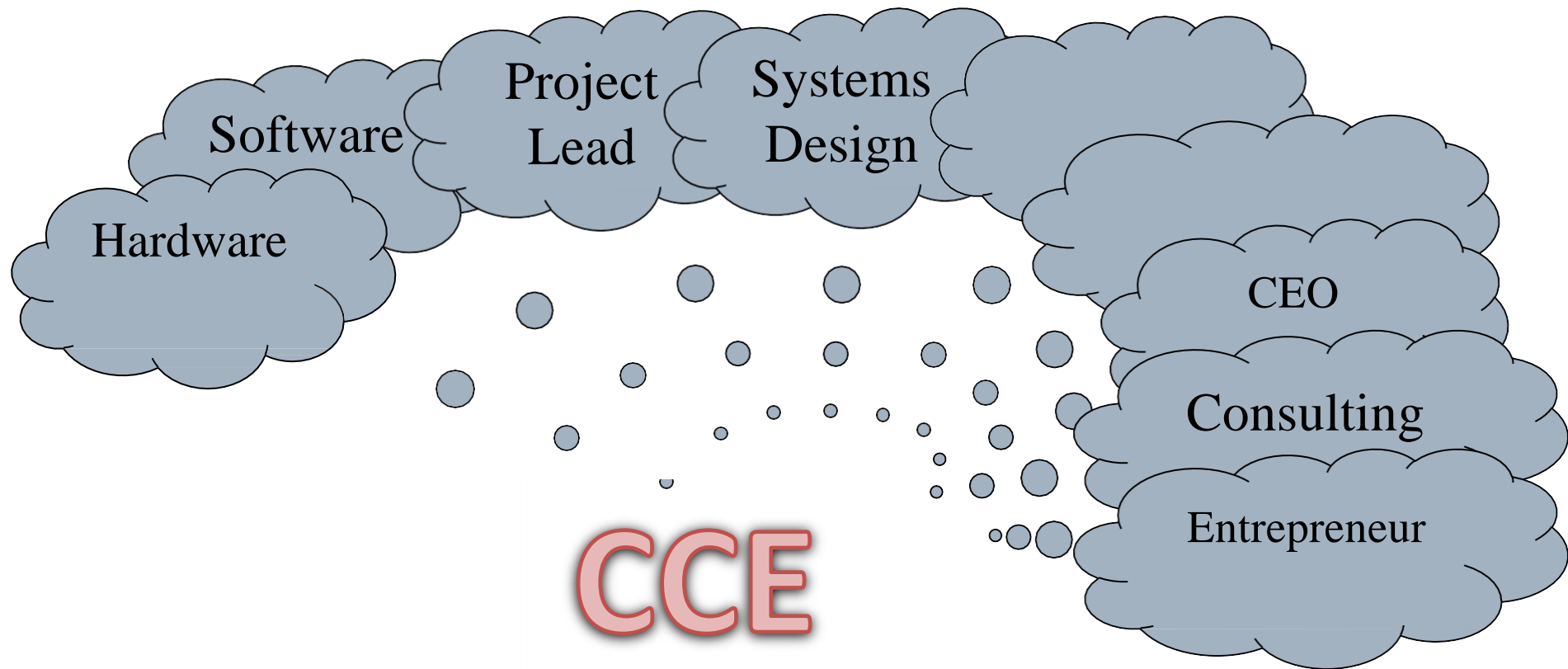
- ❑ Develop technologies for easier life...



# What do CCEs do?

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A degree in **CCE** is one of the most flexible and powerful undergraduate degrees you can get!



# What do CCEs do?

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- ❑ Easier to communicate





# What do CCEs do?

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- Easier to get energy



# What do CCEs do?

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- Easier to get energy



# What do CCEs do?

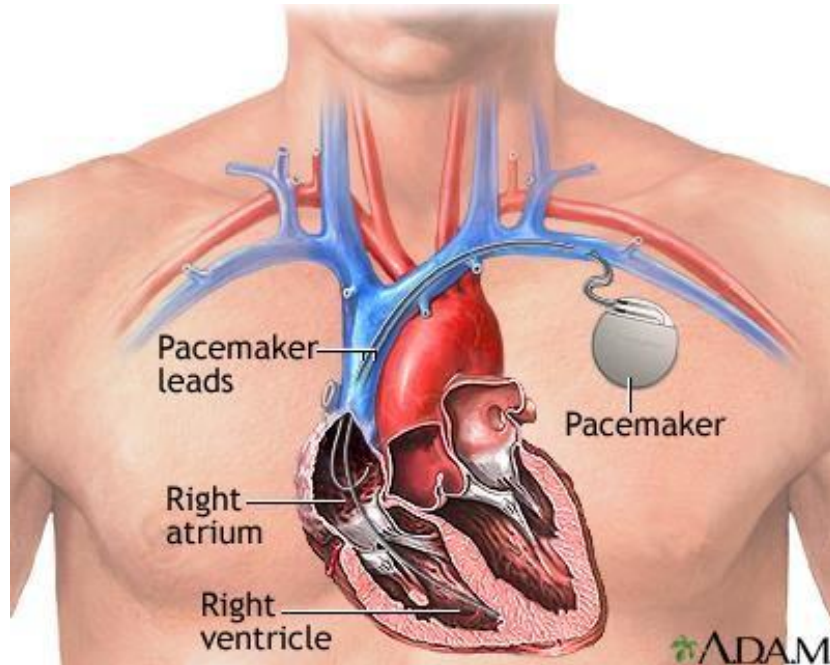
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- ❑ Easier to travel..



# What do CCEs do?

- ❑ Easier to be healthy



# Why CCE?

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- **Make a difference**
- **High satisfaction**
- **High flexibility**
- **High demand**
- **High pay**



# Why CCE?

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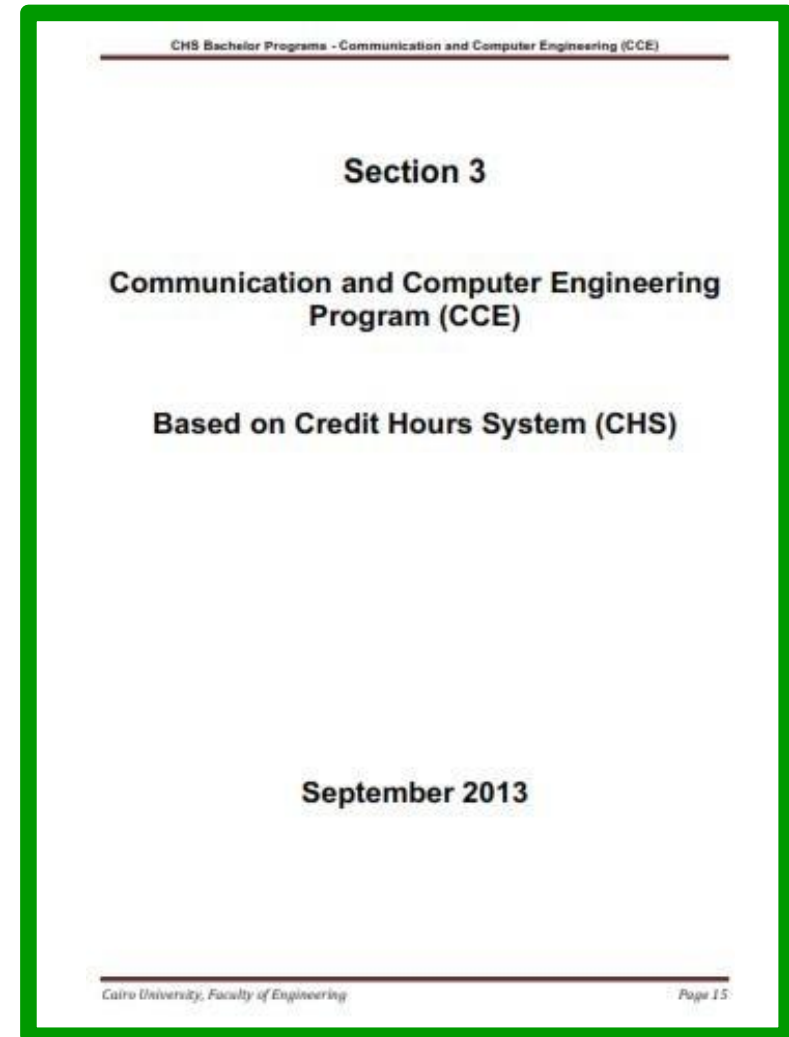
- Love work AND live life, too
- Be creative, solve problems
- Work with great people
- Design things that matter
- Never be bored
- Make a big salary
- Enjoy job flexibility
- **CHANGE THE WORLD**



# What do CCEs learn?

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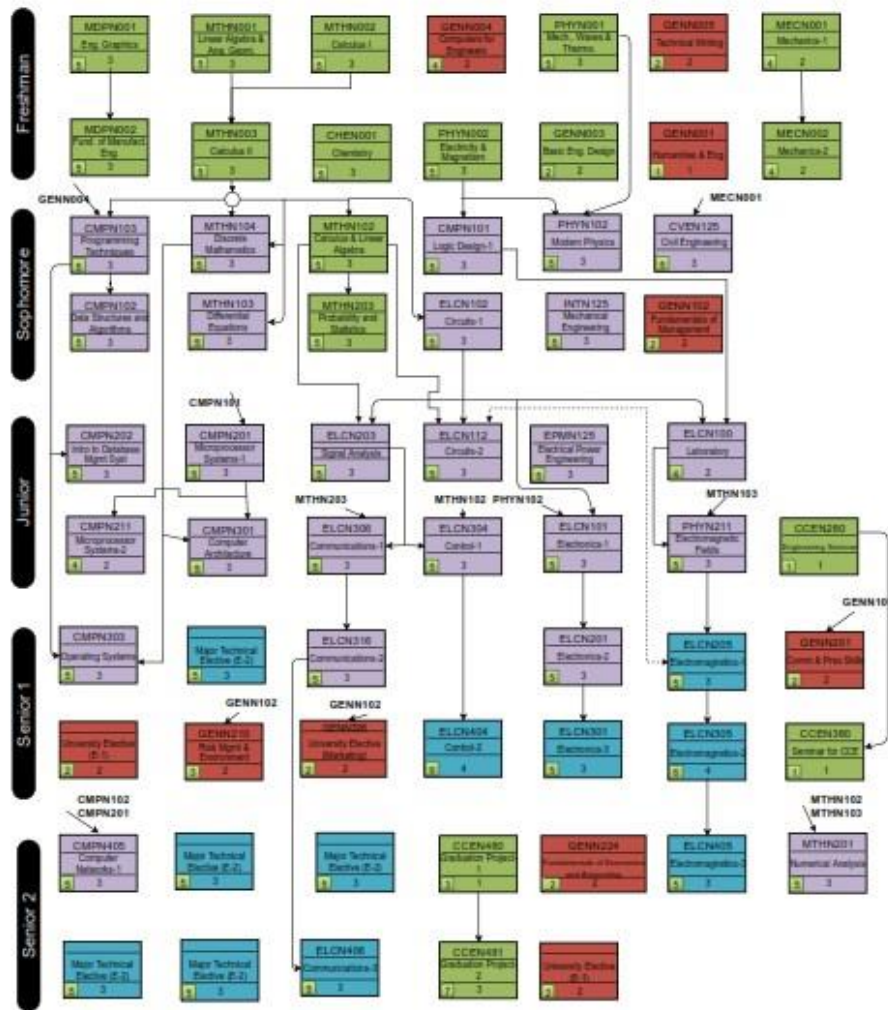
- Circuits and Electronics**
- Communication systems**
- Optical fibers and antennas**
- Computer programming and architecture**
- Computer networks**
- Embedded systems**
- Digital/Analog design**
- Software engineering**
- Machine learning**



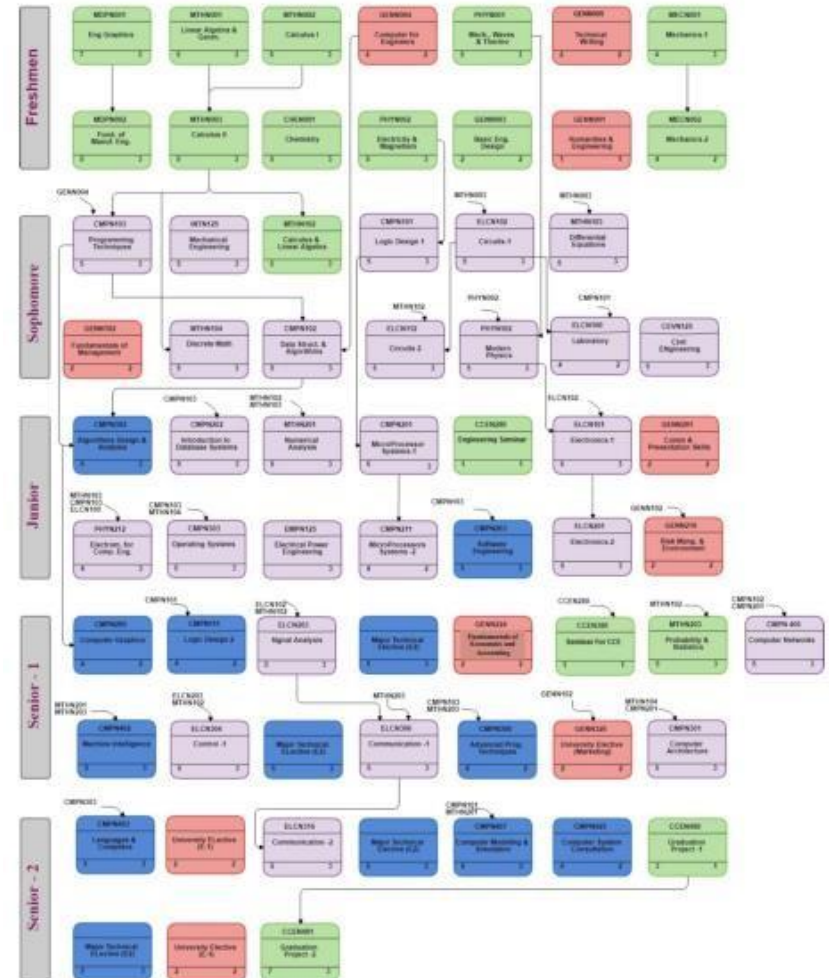
# What do CCEs learn?



Course Map – Communication & Computer Engineering  
Major in Communication Engineering (CCE-E) 2018/2019



CCE-C Course Map 2018  
175 Hours





# What careers await CCE graduates?

## □ Companies our students go to work at:

### ■ Telecommunications:



### ■ IT Products :



# What careers await CCE graduates?

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□ **Companies our students go to work at:**

■ **Embedded systems:**



■ **Electronics:**



# What careers await CCE graduates?

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- **Companies our students go to work at:**
  - **And many more companies.....**
  
- **Salary range:**
  - **Reported starting salaries: \$1100/month at Synopsys/Mentor Graphics.**
  - **Reported starting salaries: 12500LE/month at Valeo/NI**
  - **Reported starting salaries: 9500LE/month at Vodafone/Orange/Etisalat/Huawei**

# What careers await CCE graduates?

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## □ **New technologies:**

- **Intelligent systems**
- **Internet of Things (IoT)**
- **Renewable Energy**
- **Nanotechnology**
- **Robotics**
- **SDR: Software Defined Radios and Networks**
- **Big Data Analysis**
- **Cloud Computing**
- **Blockchain**

# What careers await CCE graduates?

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- ❑ **Startup companies**
- ❑ **Research at top universities**
  - **Internship, Master, and PhD programs**
- ❑ **Research and Development**
  - **International companies**
- ❑ **Academic positions**
  - **Private Universities**

# What careers await CCE graduates?

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Become an **CCE**  
and **Make a Difference**