



# Engenharia no Feminino

Uma reflexão sobre as iniciativas para a promoção da diversidade e inclusão no ensino superior do Reino Unido

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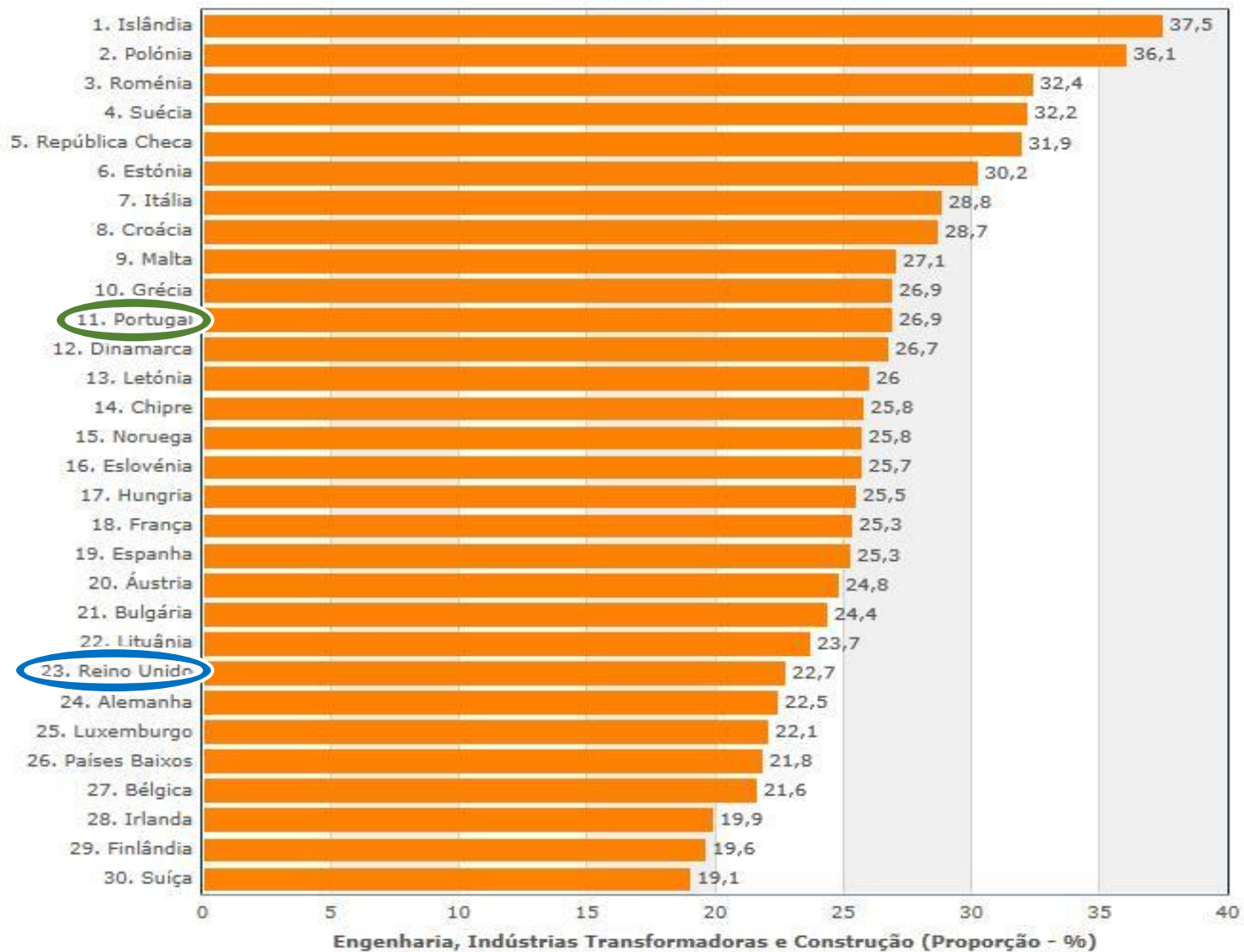
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## Mulheres no total de alunos matriculados (ISCED 5-8): total e por área de educação (%)

Valor(es) do(s) ano(s) 2018



2018

Fontes de Dados: Eurostat | UNESCO-UIS | OCDE | Entidades Nacionais - Recolha de Dados UOE

Fonte: PORDATA

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# Visão articulada

## Pré- universidade

- Contexto sociocultural: papel das engenharias na sociedade
- Contexto económico: empregabilidade
- Contexto educativo: currículo científico e aplicação às engenharias

## Universidade

- Ingresso: descrição do curso (texto, imagem)
- Ensino e cultura institucional: pedagogia, corpo docente

## Mercado de trabalho

- Articulação universidade-empresas
- Cultura organizacional/profissional

## **London Engineering Project** (RAEng 2005-2009)

Getting Girls into Engineering: a practical guide (2009)

<https://www.raeng.org.uk/publications/other/getting-girls-into-engineering-a-practical-guide>

## **Lottie on Tour** (WES – Women Engineering Society)

<http://www.weslottietour.org.uk/>

## **Tomorrow's Engineers Week** (EngineeringUK, anual)

<https://www.tomorrowsengineers.org.uk/>

## **This is Engineering** (RAEng, EngineeringUK, Neon)

<https://www.thisisengineering.org.uk/>

## **Pedagogies for Engineering** (RAEng)

<https://www.raeng.org.uk/education/schools/pedagogies-engineering>





# Meet the future you



<https://mtfy.org.uk/>

## Meet the future you



### Ever wondered what an engineer does?

Answer a few short questions and find out how YOUR skills and passions could lead to an exciting job in the future.

Whether you're just starting out, or are ready to think about your next steps, this is the quiz for YOU.

Take the quiz and get ready to be inspired...



[Start quiz →](#)

### Your Strengths are:



#### Creativity

Using your imagination to create things



#### Teamworking

Working well with other people



#### Innovation

Doing things differently for a better outcome

Congratulations! With these skills, you could have a great future in engineering. Engineers use their skills and knowledge to solve problems, making a difference to the world and improving how we live.

There are lots of different ways to get into engineering after you leave school. You could go to college, do an apprenticeship, go to university or combine different routes.

### Your top 3 career matches are:



#### Electron Pioneer

As an electron pioneer you improve eve...



Jobs include:  
Chemical Engineer  
Process Engineer  
Cosmetic Scientist



#### Civilisation Saver

As a civilisation saver you create the...



Jobs include:  
Structural Engineer  
Wind Turbine Technician  
Flood Modeller



#### Materials Maker

As a material's maker you shape the pr...



Jobs include:  
Materials Engineer  
Product Engineer  
Sustainability Manager

[View all careers](#)

[Done](#)

## Athena SWAN

<https://www.advance-he.ac.uk/charters/rec-athena-swan-initiatives>



## Recrutamento – estratégias 50-50

- Formação (diversidade, igualdade, inclusão)
- Representação
- Websites institucionais
  - Linguagem
  - Imagem
  - Testemunhos de estudantes e docentes
- Provas de ingresso
  - e.g. Física (Engenharia Civil UCL)

## Outreach

## Campanhas/Role Models

- 23 Junho International Women in Engineering Day

## Organização institucional

- Vice-Deans (Equality, Diversity & Inclusion)

## Reestruturação curricular

- UCL Integrated Engineering Programme. Problem-based – desafios económicos, sociais e ambientais. ***Person-oriented vs. Thing-oriented***
- Team-work – gender/diversity balanced

Science and engineering summer schools	▶
STEM day workshops	▶
Engineering after school clubs	▶
Coding clubs and programmes	▶
Engineering taster days	▶
Mentoring and tutoring programmes	▶
Engineering open days	▶
Research placements and work experience	▶
Engineering activities for primary schools	▶
Science and engineering masterclasses	▶
Multidisciplinary science and engineering activities	▶
STEM career events	▶
Engineering toolkits and teaching resources	▶
Engineering departmental tours	▶
Online learning and teaching engineering programmes	▶
Science and engineering fairs and festivals	▶
CPD teacher courses	▶
School talks and visits	▶

## Apoio aos estudantes

- Mentores/Tutores

- WES Mentor Set

<https://www.wes.org.uk/content/mentorset-1>

- Women in Brunel Engineering and Computing (WiBEC)

<https://www.brunel.ac.uk/women-in-brunel-engineering-and-computing>

- Sociedades

- UCL Women Engineers

UCL Student Society of Women Engineers







# Onde queremos chegar? Onde estamos?



- *Secondary data*: Estatísticas institucionais
  - N candidatas
  - N alunas que efectivamente ingressam
  - **N alunas que desistem**
  - N alunas que concluem estudos
  - **N alunas que iniciam uma carreira profissional nas engenharias/doutoramento**
  - ... e docentes/investigadoras
- *Primary data*: motivações, experiências e expectativas
- Boas práticas com potencial para ter um impacto positivo alargado, incluindo alun@s com menor representatividade nas engenharias
- Sucesso das iniciativas exigem envolvimento de tod@s – *allyship*



**Grata pela atenção**

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