



Engaging youth for a gender balanced fit-for-future engineering workforce

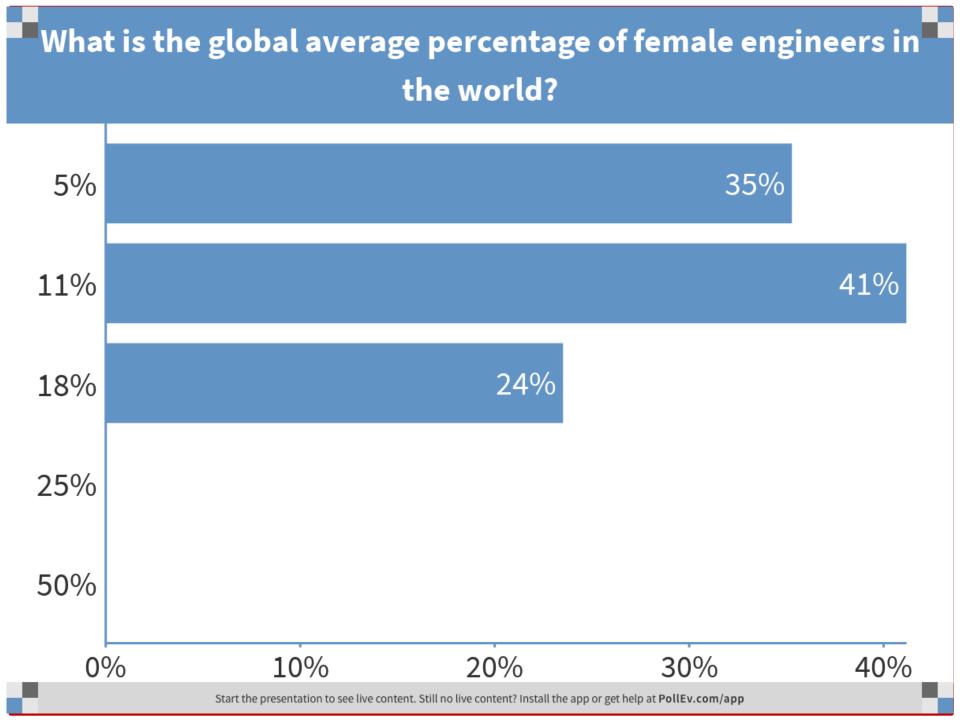
Presented by: Hema Vallabh, WomEng Co-Founder

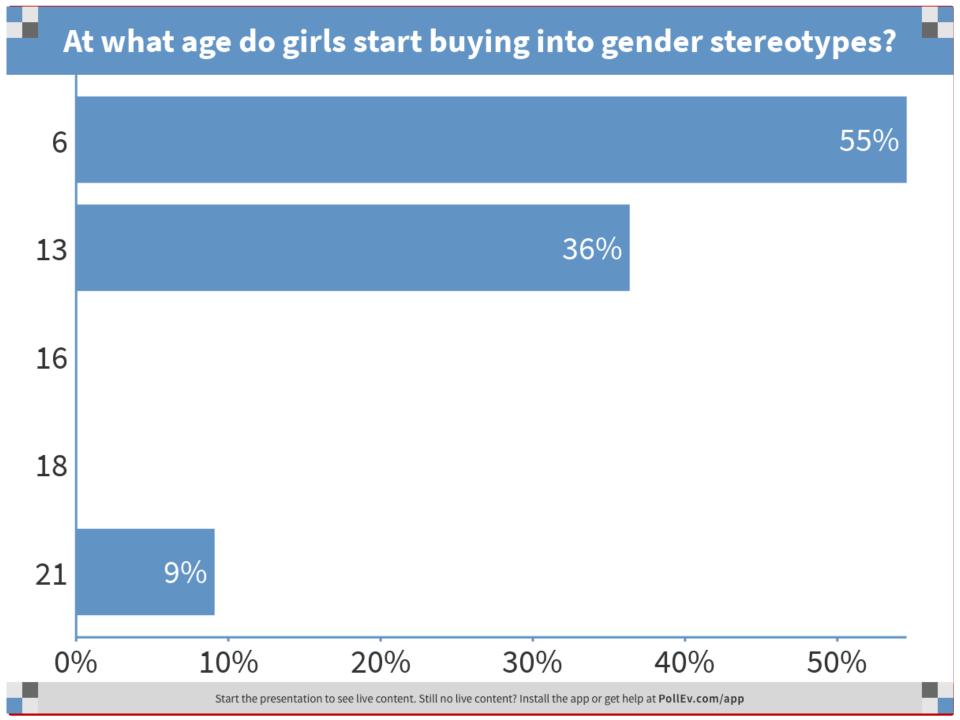
Royal Academy of Engineering London, UK 24 September 2018

Setting the Context

What is the one word that comes to mind when you hear the word Engineering?

freedom innovation create innocation creative interdisciplinarity





About WomEng

STEM Opportunity





Only 11% of all engineers globally are women.

STEM is a future skill requirement.

With a supply challenge we have a unique opportunity.

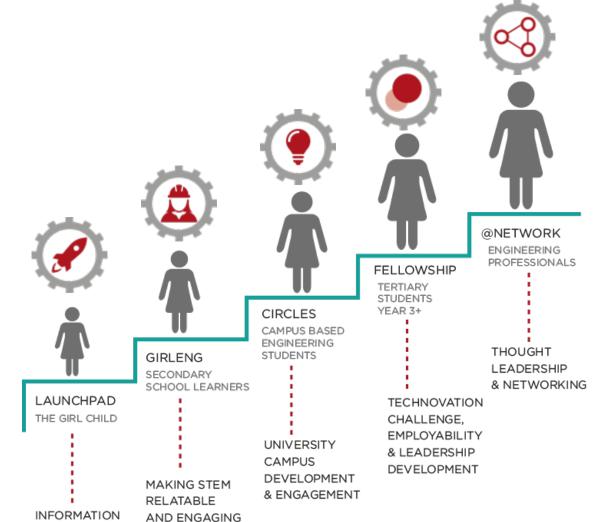
Our Mission



Our mission is
to develop a more diverse
engineering workforce
through education
and technology

Our Programs





Models at every level that are:

- Successful
- Impactful
- Scalable
- Replicable
- Implementable

FOR GIRLS

& AWARENESS

ABOUT STEM CAREERS

Global Reach





Impact



20 000

Girls reached through workshops

1082

University level alumni globally

340

GirlEng Volunteers since 2009

I've come to realise my potential and worth as a female engineer in this world and industry. Fellowship has encouraged me to strive for a better future and not settle for the one I can get.

- 2017 WomEng Fellow





- @Network attendee, 2015

"This program should continue inspiring and motivating girls around the globe. It is very admirable to realize people are working to improve opportunities for women in the (engineering) market

- WomEng Brazil Fellow, 2017











Our SDG Imperative

With women being such an integral focus both implicitly and explicitly, we could infer that gender equality will be the decisive factor in achieving these goals, together with the role that STEM and STEM professionals will play around infrastructure, climate and poverty reduction. Combining STEM and gender will create the win-win combination to achieve the majority of the SDGs.



Connect | Cultivate | Convert

Our Partners







































United Nations Educational, Scientific and Cultural Organization







Our Programs



LaunchPad

Target Audience



The girl child





Expected Outcomes

- Girls are aware of the diverse career opportunities in STEM
- · Evoking an interest in STEM
- · Breaking down stereotypes
- · Building a girl's confidence and sense of self

Key concepts covered in LaunchPad workshops include:

RE-IMAGINING CAREER CHOICES

Reframing the question
"What do we want to be when
you grow up?" to "What problem
do you want to solve when you
grow up?"

INTRODUCTION TO THE WORLD OF STEM

Presenting an outlook of the future and the role that engineers and STEM professionals play to make it possible

SELF AWARENESS & PERSONAL BRANDING

Building a sense of self-worth through self-awareness and personal branding workshops and activities

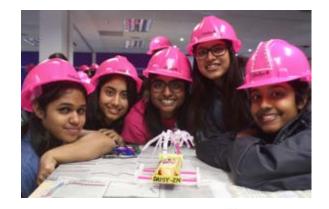


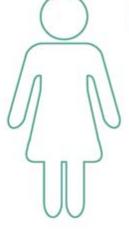
GirlEng

Target Audience •



Secondary school learners with an interest in mathematics and science







Expected Outcomes

- · Increased interest in STEM
- · Learning the value of STEM knowledge
- Building future leaders capable of solving problems and tackling new challenges
- · Develop STEM skills and knowledge
- Building projects to have a deeper understanding of STEM in the world

HOW IT WORKS



WORKSHOP



VOLUNTEER TEAM



PARTNERS



STEM EDUCATED GIRLS

#1MillionGirlsInSTEM



United Nations Educational, Scientific and Cultural Organization

Through the #1MIllionGirlsInSTEM campaign, WomEng commits to reaching 1 millions girls with the intention to create awareness and provide information about STEM related careers.

HOW IT WORKS



OPEN - SOURCE TOOLKIT



GLOBAL AMBASSADORS



LOCAL WORKSHOPS GLOBALLY



STEM AWARE GIRLS

#1MillionGirlsInSTEM





How you can help

Donate \$15 = 1 WomEng Toolkit



https://www.givengain.com/cc/1milliongirlsinstem or email donate@womeng.org to pledge



Circles

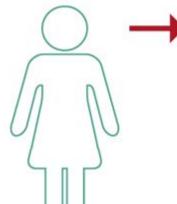
Target Audience •



Campus-based engineering students







Expected Outcomes

- Foster leadership, mentorship, networking skills and related career development skills that do not form part of the core engineering curriculum at university
- · Peer-to-peer mentoring



While we can't guarantee students will achieve their wildest dream, we can promise that joining a Circle will give them the support to go for it. Members are taking on new challenges and opportunities thanks to the encouragement of their Circle.



Students become part of their campus circle which gives them the power of peer support, a community to grow and learn together and access to resources.



WomEng provides Circles with access to:

- Step-by-step meeting guides and activities
- Articles & guides on important topics & skills
- A social feed so it is easy to stay in touch



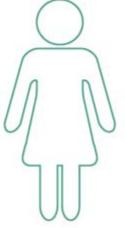
Fellowship

Target Audience



Penultimate year of undergraduate to postgraduate engineering students





Expected Outcomes

- · Develop entrepreneurial-thinking engineers
- Increase leadership, employability and networking skills
- Access to job opportunities for female engineering students
- Access to business mentors and seed capital for commercially viable ventures
- Access to highly skilled and business ready female engineers
- Insights into company perception and employers of choice for female engineers for corporate partners

HOW IT WORKS



WomEng selects top female engineering student and the brightest minds gather.



A week of workshops with leading experts that discuss gaps and challenges in the world and career development.



Fellows develop viable business solutions around a global theme.



WomEng provides seed capital and business incubation to take Fellows into potential prototyping and development.



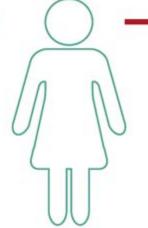
Network

Target Audience



Individuals and organisations interested in the engineering industry





Expected Outcomes

- Creating greater awareness and raising the profile of the industry
- 2. Mentorship

HOW IT WORKS



Closed Facebook Group

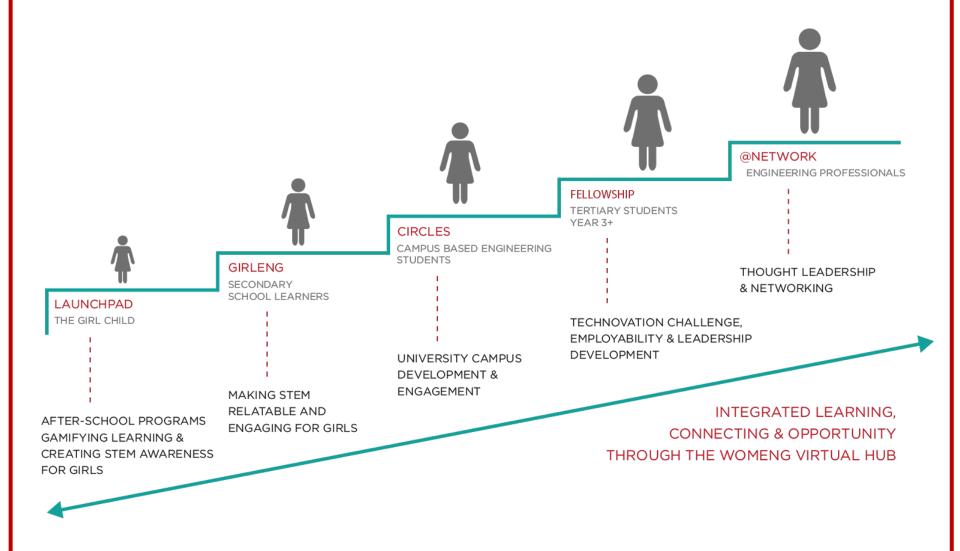
Invite-only group connecting the WomEng network of alumni, circles and volunteers which is typically made up of engineers and engineering professionals. Sharing opportunities, advice, surveys and investing in each others' development.



1:1 Mentoring

Connecting young engineering graduates to global and local thought leaders and experts.

1st Full Pipeline Solution



For more information...



For more information, connect with us at:

- info@womhub.com
- **⊕** WomEng

- @_WomEng
- womeng.org



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