

# Moving towards Gender Equality at Computer Science, TU Dublin

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COMPUTER  
SCIENCE

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1000 undergraduate students

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200+ postgraduate students

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60+ PhD students

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40+ academic staff

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Avrg. 25% UG female students

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**Winner**  
Minerva Equality  
Award 2019



“Developing the careers of female faculty”

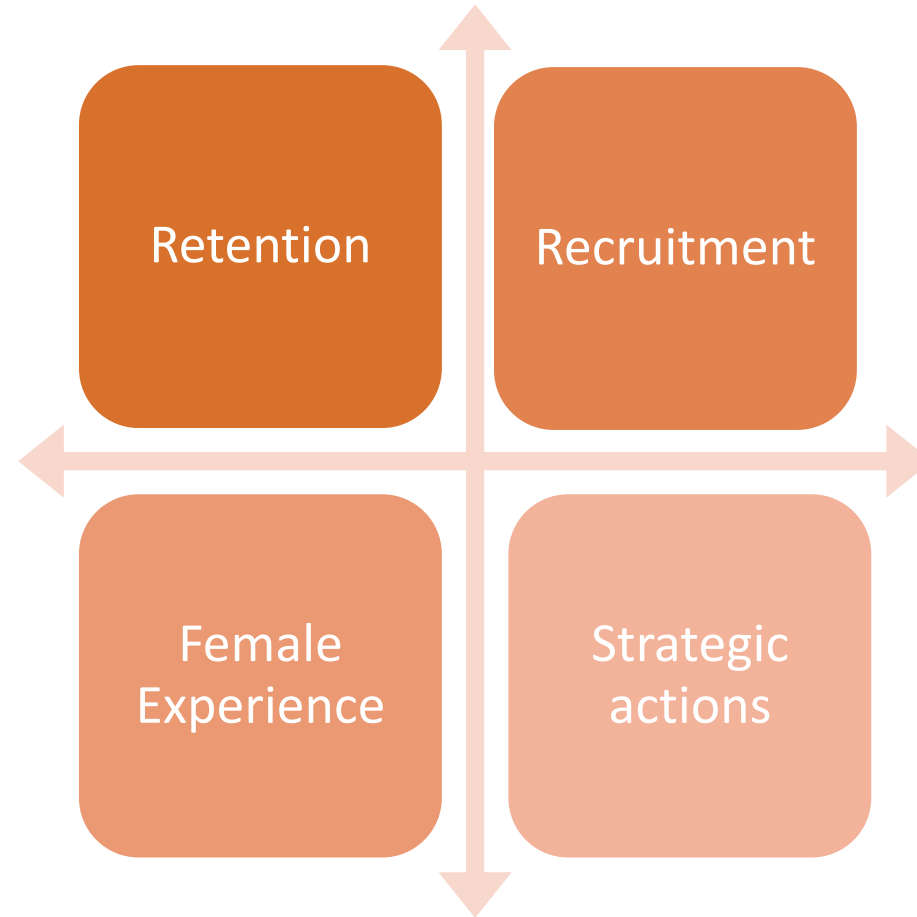
**Runner-Up**  
Minerva Equality  
Award 2018



“Encouraging female students to enrol in Computer Science programmes and retaining them”

# CS4All Initiative

Evidence based approach



# Retention

30% - 50%, averaging 45%, first year retention

Link between progression and attendance

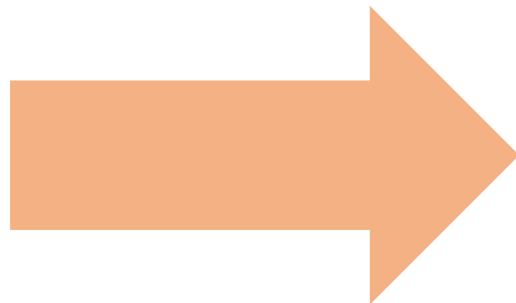
Link between programming skills and success in later years



- Monitored attendance with active follow-up
- Graded work in labs to encourage attendance
- Thresholds on programming exam

# Recruitment

Over 40% of computer science programmes in Ireland had **less than 10% female** new entrants in 2014-15



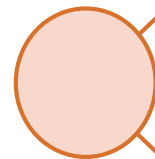
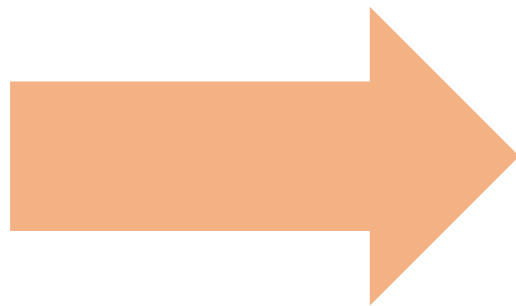
- Introduced new hybrid programme including languages and mobility
- Free coding classes for non-tech girls
- Computing Academy for transition year secondary school students



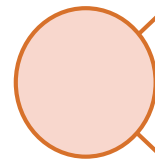
# Female Student Experience

Identified female students experienced isolation and difficulty in finding peer groups

... but did not want 'special treatment'



Girls places with other girls in lab groups



Regular meet ups

# Strategic actions



Established INGENIC network across HEIs in Ireland

**Increase Enrolment** of female-identifying students on third-level computing programmes

**Improve Experiences** of female-identifying students in computing programmes

**Assist Staff** to identify and develop methods of improving gender diversity and equality

**Collaborate** across Higher Education Institutes



# Strategic actions

The logo for ESTeEM, with 'EST' in orange, 'e' in green, and 'EM' in blue.

Equality in Science and Technology  
by Engaged Educational Mentoring

Mentorship programme for students

Role models from Industry as mentors  
to students

Format - regular events with activities  
and discussion with mentors

# Strategic actions

The logo for TECHMATE, featuring the word "TECHMATE" in a bold, teal, sans-serif font, centered within a light teal rectangular background.

Best Practice Toolkit for  
Gender Equality in  
Computer Science Education

<https://ascnet.ie/techmate/>

Comprehensive review of literature for  
initiatives with impact

<https://arxiv.org/pdf/2206.06113>

Development of an online toolkit to  
encourage use of these initiatives

Project funded by Irish government &  
Huawei

# Strategic actions

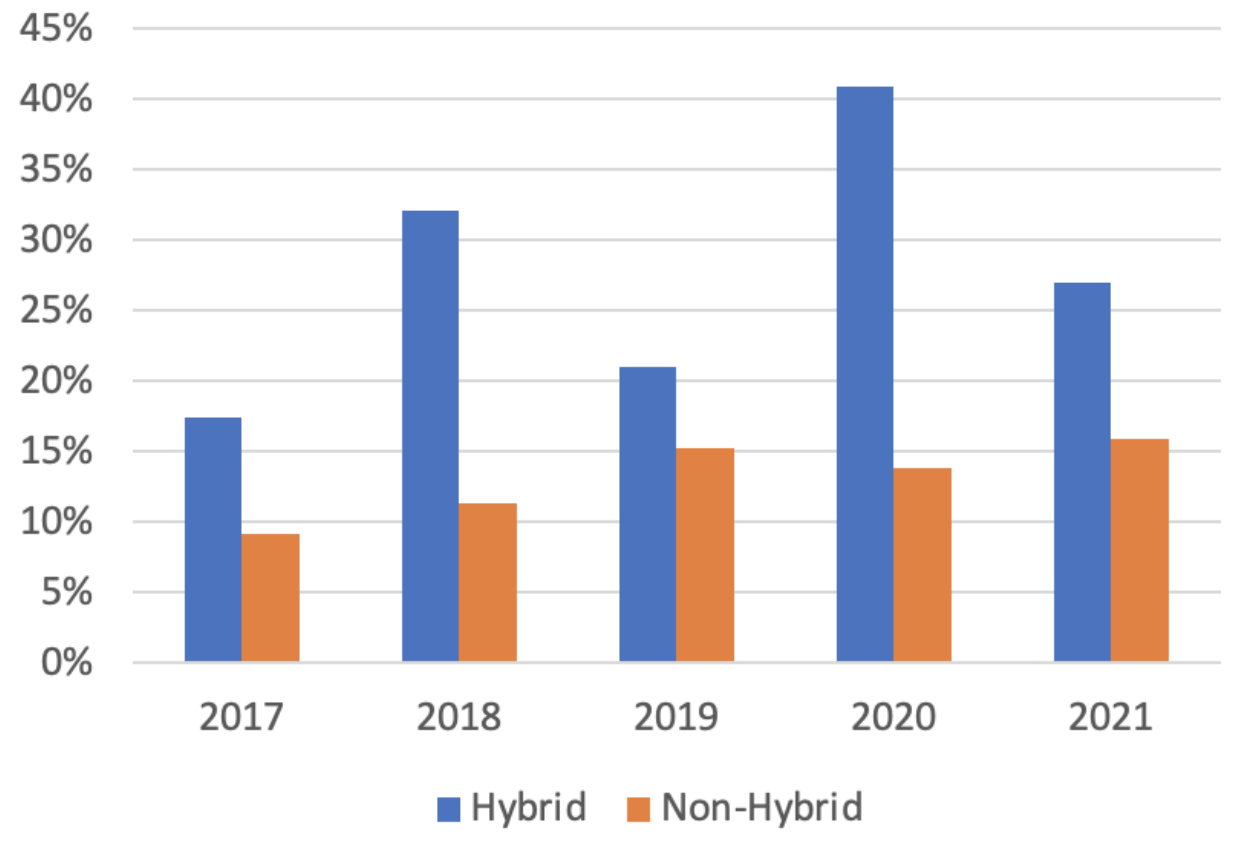


A network of staff across TU Dublin with aim of increasing diversity and retention in technology programmes

Events such as Meet & Greet for new students, IWD events, etc.

Workshops with female students to help them apply for scholarships

# Impact



New female students per year (%) for our hybrid programme vs the the non-hybrid ones

# Thank you!

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