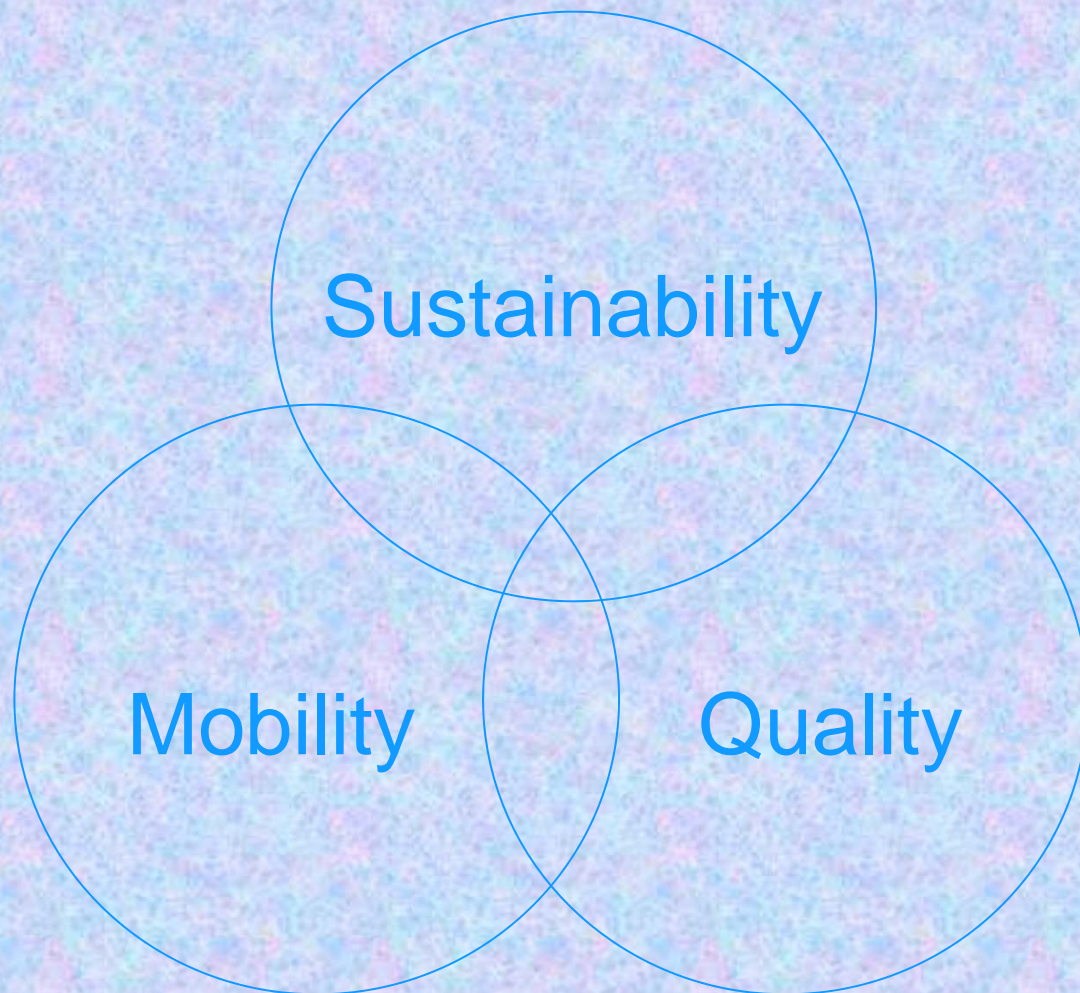


**Sustainability
Quality
Mobility**

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Challenge for Engineering Education



- **Resource Constraints**
- **Can we do justice to all at the same time?**
- **What is the order of priority?**

Sustainability

- Needs to be embedded in our curricula, and in our lifestyles
- Reduce, reuse, recycle
- What is the carbon footprint of a gathering like this?
- How can we achieve a more equitable distribution of usage of resources?
- Focus our energy on technological step changes in utilisation (for example, the energy required to extract minerals)

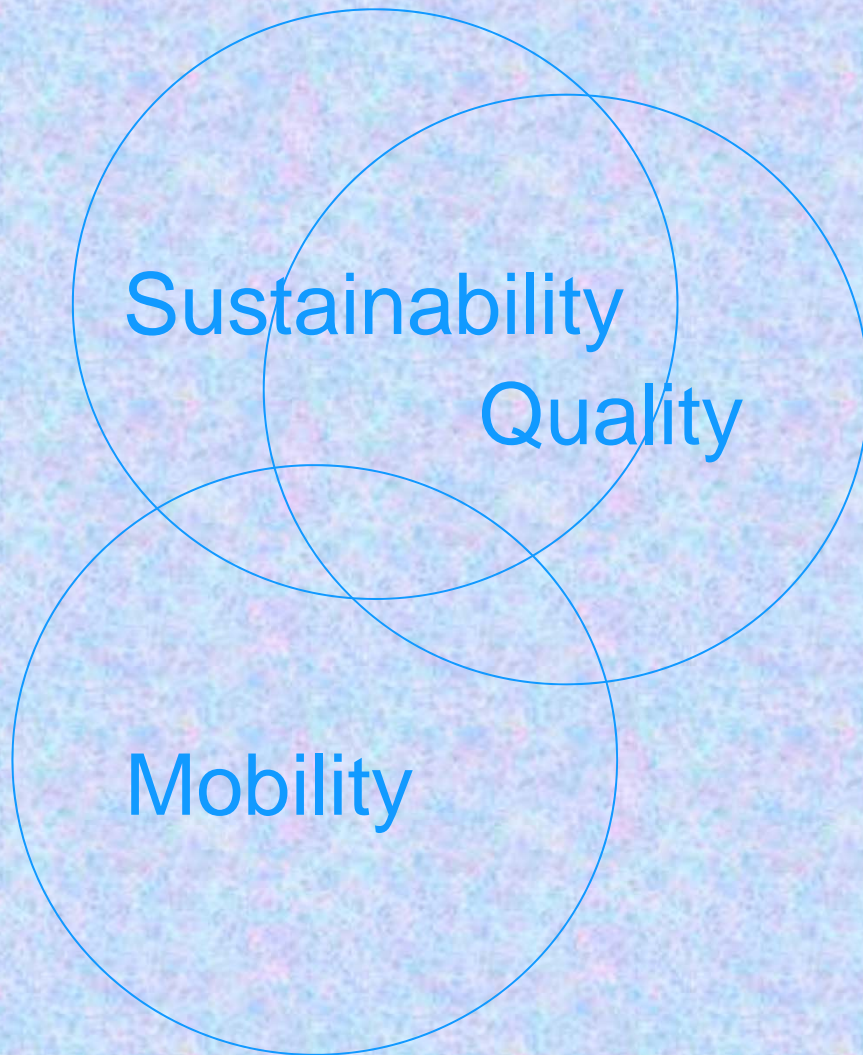
Quality

- Developing countries should learn from one another
- We do need to enhance quality so that all can qualify for accreditation
- IFEES should encourage this, but not police it!
- Quality is exceeding the minimum
- It varies within a country and within an institution
- Each programme tends to produce a particular kind of graduate

Mobility

- Largely between developed countries
- Dangerous for developing countries
 - Many African students see Engineering as a ticket out of their countries
 - Developed countries suck in the best students from developing countries
 - We need all the talent possible ourselves
 - It takes a long time to get returns
- Multinationals need to employ locals, with expats to mentor them
 - Requires local knowledge

Order of Priority?



- **Given limited resources
Mobility must come last**
- **Without Quality we cannot achieve
Sustainability, so these are joint first**