Master of Advanced Engineering (Energy and Sustainability)
– Energize Your Future!
Education – Snapshot

- Over 1,300 students now enrolled in Engineering
- **Common 1st year** followed by **five** undergraduate branches
  - Chemical Engineering (CHE)
  - Civil Engineering (CIV)
  - Electrical & Computer Systems Engineering (ECSE)
  - Mechanical Engineering (MEC)
  - Mechatronics Engineering (TRC)

- **An increasing population of postgraduates**
  - Master & PhD (*by Research*)
  - Students benefit from a strong research environment
Master of Advanced Engineering (Energy & Sustainability)

- **Master of Advanced Engineering**
  - Clayton offers this in traditional branches
  - Malaysia offers multi-disciplinary Energy and Sustainability

- **Energy and Sustainability**

The Master of Advanced Engineering (Energy and Sustainability) is designed for *working engineers and engineering graduates* with an ambition to lead. Addressing the pertinent demands in *sustainable energy development*, the course guides students to greater applicable knowledge in this area of specialisation and to succeed in complex problem solving methods.
• **Area of Study**
  
  – Build a core competency in **energy and sustainability area**, while developing your **entrepreneurship** and **data analysis** skills!
  
  – **Core units**: Data Analysis, Engineering Entrepreneurship and Research Method
  
  – **Specialization units**: Principles and Practices of Sustainable Development, Energy Efficiency and Sustainability Engineering, Sustainable Energy Technologies, Green Building
  
  – **One elective unit**: Choose one unit from Environmental and Air Pollution Control or Smart Grids

• **Research Option**

This program offers a research pathway option as an alternative route for students to progress from a coursework master’s program into a **PhD program**. The research option requires the recommendation of the Associate Head of School (Graduate Research) and approval from the Faculty/ MGE (Monash Graduate Education).
Why Energy and Sustainability?

Humanity’s Top Ten Problems for next 50 years

1. ENERGY
2. WATER
3. FOOD
4. ENVIRONMENT
5. POVERTY
6. TERRORISM & WAR
7. DISEASE
8. EDUCATION
9. DEMOCRACY
10. POPULATION

2004 6.5 Billion People
2050 ~ 10 Billion People

--- R. Smalley, Rice Univ.
Why Energy and Sustainability?

Align to Malaysian national key priority area

- Renewable Energy Act of 2011
- Sustainable Energy Development Authority (SEDA)
- National Renewable Energy Policy
  - Achieving 20% Renewable Energy (RE) Capacity Mix By 2025
- Malaysian Energy Commission
Job Prospects

- Possible Jobs
  - Consultant
  - Policy Analyst
  - Senior/Project Manager
  - Energy manager
  - Competency renewable engineer

- Possible Sectors
  - Oil and Gas
  - Electricity Subsector
  - Construction
  - Green Energy companies
  - Industries
  - Renewable energy companies
Entry Requirements

Four-year engineering degree
- 70% average or equivalent
- 65% average or equivalent and five years working experience

Three-year engineering degree
- 70% average or equivalent and two years working experience
- Not a top-up for candidates seeking registration with Board of Engineers Malaysia

Others
- English Language requirements
Duration and Fees

Course Details

- 1 year full-time OR
- 2 year part-time
- Mostly evening classes

Fees

- RM 49,000 for Malaysians
- RM 53,900 for international students

Limited scholarship available
Industrial visits
We believe in active learning!!
Industry Engagement

Field Trips
Case Studies
Industry Training
Industry Advisory Panel
Engineering and IT Leadership Program
Research Projects
Scholarship for PhD
Thank you

Q&A