

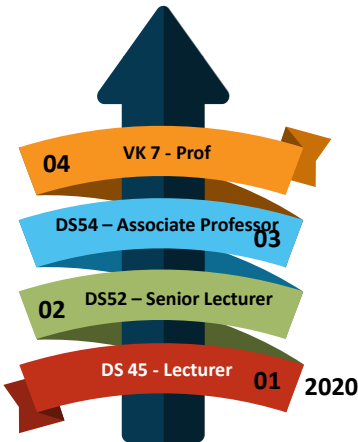


**KURSUS WAJIB DS45**  
**UTeM : Issues and Challenges**  
**Abd. Rani Othman**

**Academic Lecturer career paths**

Name :  
Staff ID:  
Fakulty :  
Service before retire:

Your Planning



List down the challenges as an academic lecturer ?



**WAWASAN 2020**  
 29 Februari 1991 : (PELAN 30 TAHUN)  
 RMk 7 hingga RMk 11 RMK ???

















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Excellence Through Competency



**9 CABARAN WAWASAN 2020**



## Wawasan 2020

- Diperkenalkan oleh YAB Dato Seri Dr Mahathir Mohamad bekas Perdana Menteri Malaysia pada 28 Februari 1991. Sembilan cabaran utama ialah:
  - a) Cabaran 1 - membentuk sebuah negara bangsa yang bersatu padu serta menyanjung masa depan yang dikongsi bersama
  - b) Cabaran 2 - melahirkan masyarakat yang bebas, teguh dan terbentuk jiwanya
  - c) Cabaran 3 - membentuk dan memperkembangkan sebuah masyarakat demokrasi yang matang
  - d) Cabaran 4 - membentuk masyarakat yang kukuh ciri-ciri moral dan etikanya
  - e) Cabaran 5 - membentuk sebuah masyarakat matang yang bersifat liberal dan toleransi
  - f) Cabaran 6 - membentuk sebuah masyarakat yang bersifat sains dan progresif serta berdaya cipta
  - g) Cabaran 7 - membentuk masyarakat yang berbudi bahasa dan berbudaya penyayang
  - h) Cabaran 8 - menjamin terbentuknya sebuah masyarakat yang adil ekonomi
  - i) Cabaran 9 - membentuk masyarakat yang makmur

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# PERUTUSAN NC







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# IR 4.0





**WHAT IS THE 4IR?**

“A stage in the development of knowledge in which the lines between the physical, digital and biological spheres are being blurred”  
(Schwab, 2016).

**4IR backbone includes:**

- 1) Artificial Intelligence
- 2) Cloud Computing
- 3) Big Data Analytics
- 4) Internet of Things

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**“Because of rapid economic and social change, schools have to prepare students for jobs that have not yet been created, technologies that have not yet been invented and problems that we don't yet know will arise.”**

(Andreas Schleicher  
OECD Education Directorate: 2011)

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WORLD  
ECONOMIC  
FORUM

## 2022 SKILLS OUTLOOK

### Growing

- 1 Analytical thinking and innovation
- 2 Active learning and learning strategies
- 3 Creativity, originality and initiative
- 4 Technology design and programming
- 5 Critical thinking and analysis
- 6 Complex problem-solving
- 7 Leadership and social influence
- 8 Emotional intelligence
- 9 Reasoning, problem-solving and ideation
- 10 Systems analysis and evaluation

### Declining

- 1 Manual dexterity, endurance and precision
- 2 Memory, verbal, auditory and spatial abilities
- 3 Management of financial, material resources
- 4 Technology installation and maintenance
- 5 Reading, writing, math and active listening
- 6 Management of personnel
- 7 Quality control and safety awareness
- 8 Coordination and time management
- 9 Visual, auditory and speech abilities
- 10 Technology use, monitoring and control

Source: Future of Jobs Report 2018 - WEF

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Competency



# **FUTURE HIGHER EDUCATIONS**

## **FUTURE HE ENVIRONMENT**

- ✓ How will the lecturers teach? (method)
- ✓ How will the students learn?
- ✓ What will the lecturers teach (content)?
- ✓ How will the learning space look like?
- ✓ What are the roles of the lecturers?
- ✓ What are the roles of the students?
- ✓ What are the roles of support officers/staff
- ✓ What are the attributes of the students/lecturers/support?



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# **IR 4.0**



**AKHLAK**  
(Ethics and Morality)

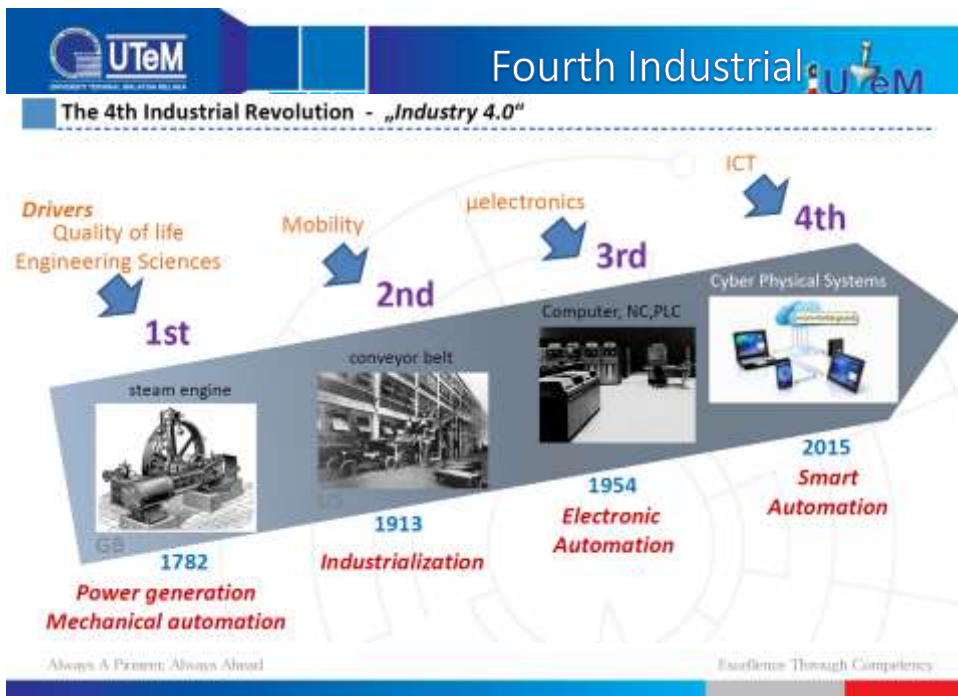
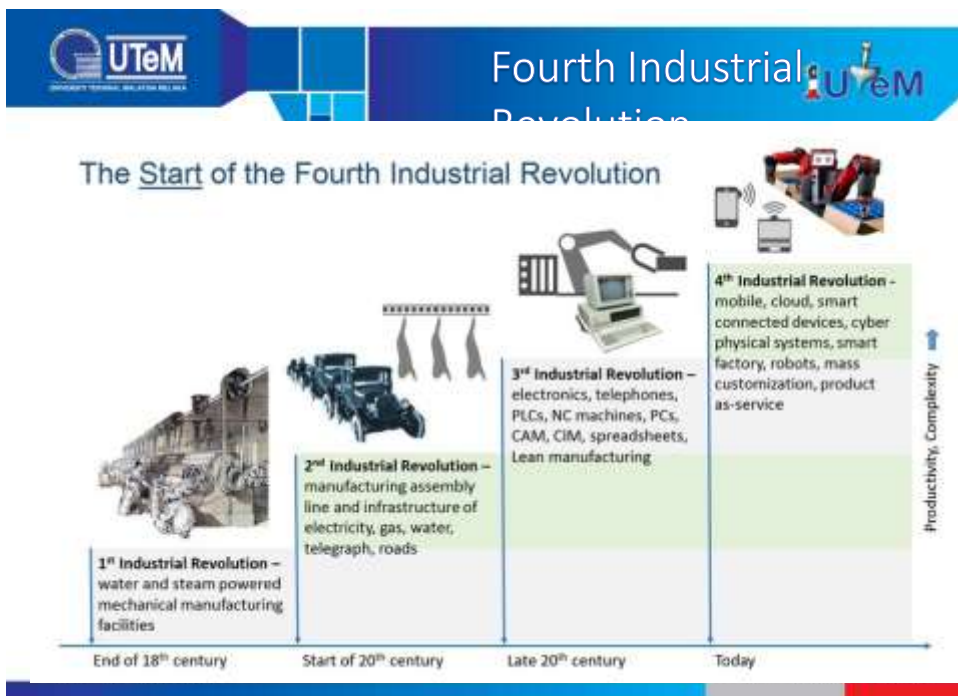
**BALANCE**


**ILMU**  
(knowledge and Skills)

## **FUTURE PROOF TALENT**


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# AMANAT MENTERI 2020



**MAJLIS AMANAT & ASPIRASI**  
**YAB PERDANA MENTERI MERANGKAP PEMANGKU MENTERI PENDIDIKAN**  
**6 FEBRUARI 2020 | KHAMIS**

01

BUDAYA,  
NILAI HIDUP

- Kesanggupan berusaha berprestasi-sungguh-sungguh untuk kejayaan
- Amanah, meniadak sesuatu yang dilarang, gigh, lakin dan berdisiplin.

02

PENDIDIKAN SAINS, TEKNOLOGI, KEJURUTERAAN & MATEMATIK (STEM)

- STEM diberi penekanan – bagi melahirkan masyarakat yang mempunyai literasi STEM serta berkemahiran tinggi.

03

PEMBENTUKAN NILAI MODAL INSAN

- Pelaksanaan aktiviti Service Learning Malaysia – University For Society @ SULAM – kaedah pembelajaran melalui penyelesaian permasalahan komuniti.

04


PENGUKUHAN PENDIDIKAN BAHASA INGGERIS

Pelancaran


English Language Education Reform in Malaysia : The Roadmap 2015 - 2025

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# AMANAT MENTERI 2020



05

PENDIDIKAN & KEMAKMURAN BERSAMA

- Strategi Transformasi Modal Insan – antara teras dalam Yawasan Kemakmuran Bersama 2030.
- Fokus transformasi – penyediaan halaju sumber tenaga yang lebih produktif, efektif, kemahiran, berteknologi dan bernilai tinggi termasuk dalam industri ekonomi baharu.

06

KECEMERLANGAN INSTITUSI & KEUNGGULAN GLOBAL

- Penguatan kolaborasi dengan institusi yang disenaraikan sebagai Top 100 di dunia oleh QS World University Rankings
- Peningkatan hubungan tripartite – menawarkan penyelesaian kepada masyarakat.
- Menggalakan penyelidikan yang dipacu permintaan atau demand driven
- Pelaksanaan Public Private Research Network 2.0 (PPRN2.0) dan Prototype Research Grant scheme (PRGS 2.0)

07

PENDIDIKAN & LATIHAN TEKNIKAL DAN VOKASIONAL (TVET)

- Menyumbang ke arah pembentukan negara membangun yang makmur dan inklusif
- Menyodokkan tenaga kerja berkemahiran tinggi.
- Penawaran program berfalsafah industry driven.
- Pelaksanaan Peta Strategi Pemerkasaan TVET – menghasilkan graduan TVET yang seimbang, holistik dan bernilai keusahawanan – pekerja berkemahiran tinggi.
- Yawasan Industry-led TVET – kurangkan permasalahan skill mismatch

08

PEMERKASAAN INSTITUSI PENDIDIKAN TINGGI

- Memansuhkan Akta Universiti 1971 (AUKU) dan digantikan dengan undang-undang yang lebih baik serta kompetensif.

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# AMANAT NC 2020




## TEMA 2020

### PERUTUSAN NC


“**MENJUARAI TEKNOLOGI,  
MEREALISASI ASPIRASI**”

Selaras dengan tagline Sentiasa Merintis, Sentiasa Menerajui, UTeM berhasrat untuk terus **mengungguli bidang Sains, Teknologi dan Kejuruteraan** bagi mencapai aspirasi UTeM menghasilkan **bakat berkemahiran tinggi** yang berupaya **memperkasa invensi dan inovasi** bagi menjadi Universiti Teknikal yang kreatif dan inovatif terkemuka di dunia.

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# AMANAT NC 2020



CONCEPT

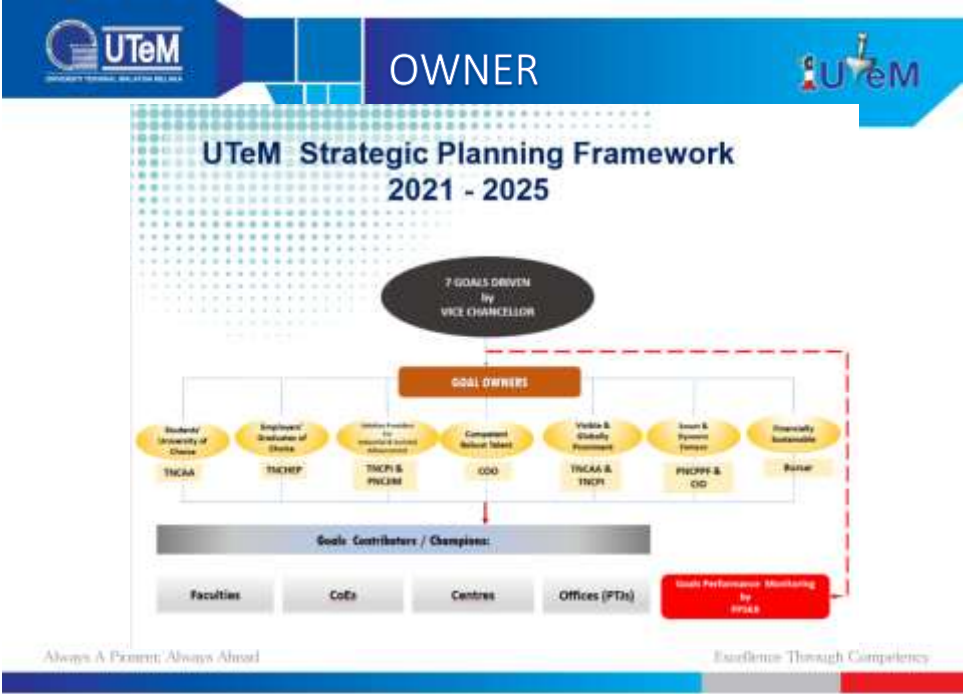
## T.U.N.A.I

TECHNOLOGY  
@UNIVERSITY  
ADVANCING  
INDUSTRY AND SOCIETY

A University that produces highly skilled  
technologists and enhances inventions,  
thus impacting industries and society.

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## SOLUTION PROVIDERS FOR INDUSTRIAL & SOCIETAL ADVANCEMENT

- 01** Enhancing Industry-demand driven based projects in manufacturing and computing industry
  - Embed industrial-demand products and services in research grants applications.
- 02** Holistic and highly competent technology scholars
  - Promoting academic staff to be involved in enhancing inventions and innovations.
- 03** Securing high impact projects
  - Securing high impact projects through collaborative efforts between industry-university such as matching grants, contract projects, consultations and innovative solutions.
- 04** Strengthening strategic linkages between UTeM-Industry-Community
  - Strengthening the linkages between university-industry-community by having a one stop centre, establishing smart partnership, providing platform for industry in university and increasing number of certified labs and number of R&D&I products.

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## GLOBALLY VISIBLE & PROMINENT

- 01** Strategizing for QS Asia Ranking
  - Number of papers in SCOPUS indexed journals
  - Number of paper with globally recognized and international / industries affiliations
  - Number of citations in SCOPUS database
- 02** Strategizing for QS Asia Ranking Subjects in E&T
  - Number of papers in SCOPUS indexed journals
  - Number of paper with globally recognized and international / industries affiliations
  - Number of citations in SCOPUS database
- 03** Industry preferred solution provider focusing on advanced manufacturing & computing technology.
  - CEO Round Table / Luncheon Talk
  - MoU/MoA with globally recognized institutions/industries
- 04** Strengthening strategic linkages between university and reputable entities (society & industry).
  - Number of papers in SCOPUS indexed journals
  - Number of paper with globally recognized and international / industries affiliations
  - Number of citations in SCOPUS database
- 05** Enhance Strategic and dynamic technology scholars through affiliation with renowned global researchers from universities and industries.
  - Number of papers in SCOPUS indexed journals
  - Number of paper with globally recognized and international / industries affiliations
  - Number of citations in SCOPUS database

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TUAH -GO



Potensi Bakat TUAH

TUAH - assist (softskill)

TUAH - preneurs

Rahmat, (Respect, Happiness, Love)

TUAH Skills

TUAH-vengary (suksesnya wara)

Run-Run TUAH

TUAH -INSAN

Apel TUAH Kompetisi

MyHEP

INISIATIF TUAH -Go!

Transformasi Pelajar  
Pemeriksaan Pelajar

#EMPLOYERS'GRADUATES  
OFCHOICE

TUAH -Sihat  
Sejahtera

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Ringkasan Bakuat

RANCANGAN  
MALAYSIA  
KESEBELAS

2016-2020

PERTUMBUHAN BERPAKSIKAN RAKYAT



#RMK11 : 6 TERAS STRATEGIK

MEMPERKUHA  
PESANBUHAN  
INDUSRI  
KE ARAH  
MASYARAKAT  
YANG SAKESAMA

MEMPERKASA  
KESEJAHTERAAN  
RAKYAT

MEMPERKASA  
PESANBUHAN  
MODAL BISNIS  
UNTUK MENJADI  
NEGARA MAJU

MEMPERKUHA  
INFRASTRUKTUR  
UNTUK  
MENYOKONG  
PERKEMBANGAN  
EKONOMI

MEMPERKASA  
PERTUMBUHAN  
EKONOMI UNTUK  
PENINGKATAN  
KEMAKMURAN

MEMBUKA KE ARAH  
PERTUMBUHAN  
RILAU SAMA  
MEMPERKASA  
KEMAMPUAN  
DIAH DAYA TAPAN

"PERTUMBUHAN BERPAKSIKAN RAKYAT"

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**Expected Outcomes: TVET under 11th. Malaysia Plan**

Ringkasan Eksekutif  
**RANCANGAN  
MALAYSIA  
KESEBELAS**  
2016-2020  
PERTUMBUHAN BERTAKWIDAN RAKYAT





**Public (Students)**  
Clear education pathways and employment with better income

**Institutions**  
Specialization and optimization

**Programme**  
Industry compliance and high employability

**Instructor/Lecturers**  
Highly skilled and better delivery

**Industry**  
Better engagement with institutions

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**PROGRAM TRANSFORMASI KERAJAAN  
6 NKRA (National Key Results Areas)**





**NKRA**  
National Key Results Areas

Reducing Crime

Fighting Corruption

Improving Student Outcomes

Rising Living Standards of Low-Income Households

Improving Rural Basic Infrastructure

Improving Urban Public Transport

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# PENJANAAN PENDAPATAN






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# PENJIMATAN

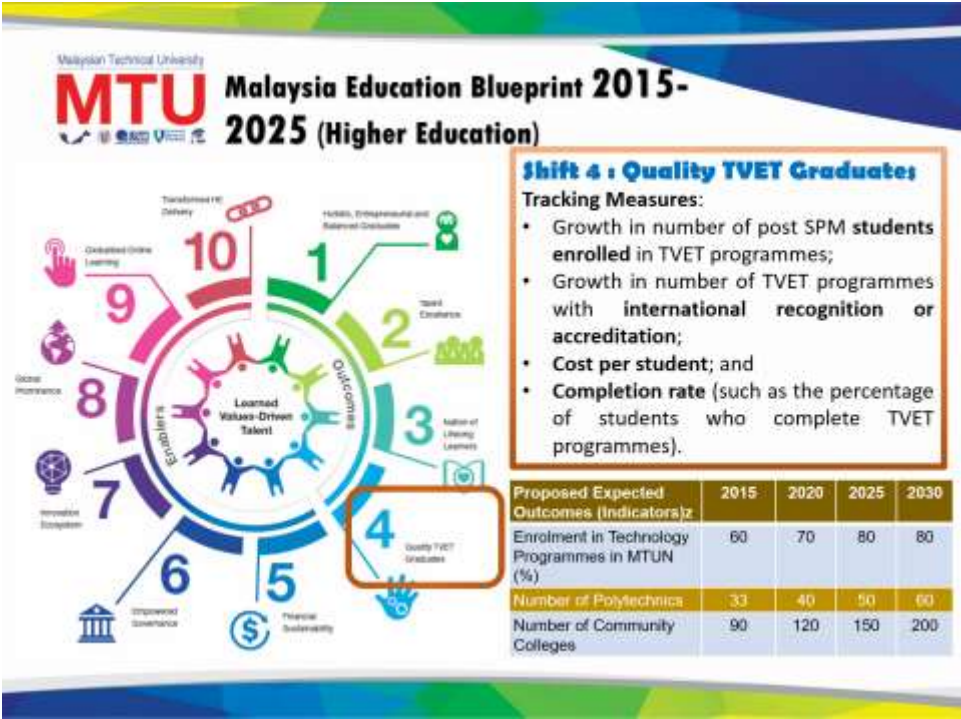




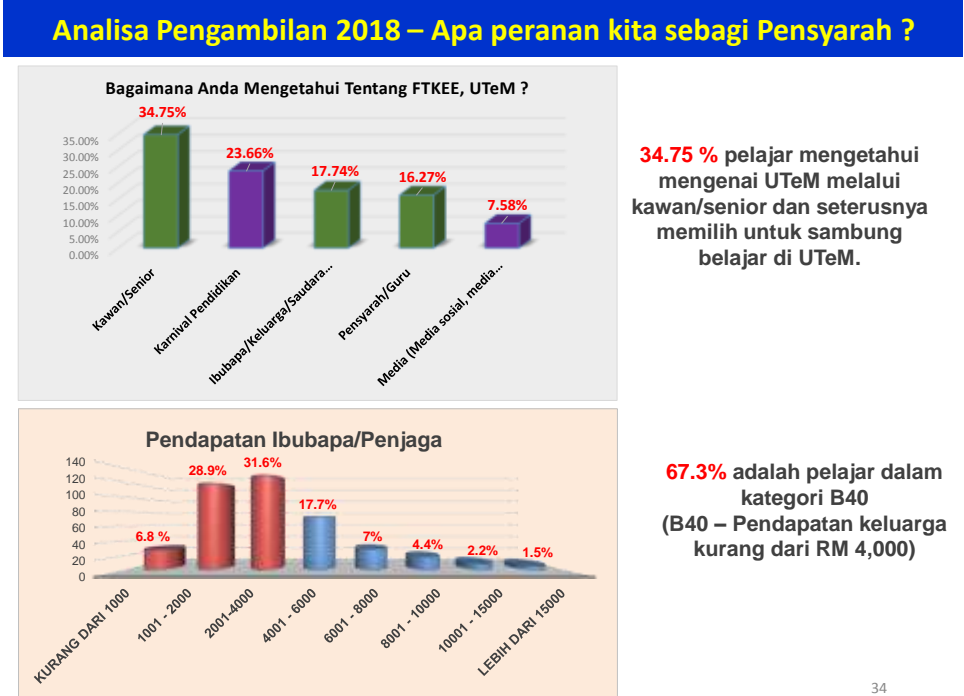
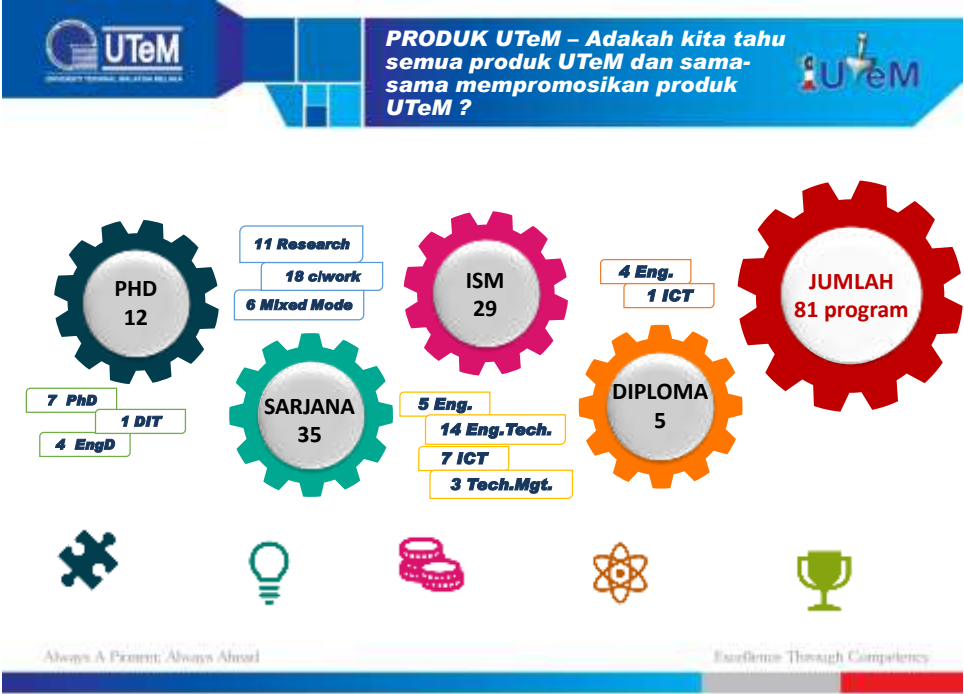
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UTeM  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Apa peranan Pensyarah di dalam mengukuhkan nic penyelidikan UTeM ?



UTeM  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

**ADVANCED MANUFACTURING AND COMPUTING TECHNOLOGY**

- \* Rapid Manufacturing Technology
- \* Green Materials
- \* Green Manufacturing
- \* Lean Manufacturing

**GREEN TECHNOLOGY**

- \* Production Planning & Control
- \* Quality & Reliability Engineering
- \* Manufacturing Optimization
- \* High Voltage Technology

**SYSTEM ENGINEERING**

**UTeM**  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

**HUMAN - TECHNOLOGY INTERACTION**

- \* Advanced Control System
- \* Computer Systems & Security
- \* Software & Information Systems
- \* Human Factor in Production

**EMERGING TECHNOLOGY**

- \* Nano Materials
- \* Virtual & Intelligent Manufacturing
- \* Advanced Machining & Tooling
- \* Broadband & Multimedia Systems

**PENYELIDIKAN – BIDANG NIC**  
(selepas semakan semula dikalangan MTUN)













UNIVERSITY TEKNOLOGI MALAYSIA

## Apa peranan Pensyarah bagi memastikan aktiviti pengantarabangsaaan ditingkatkan lagi ?





**Mewujudkan jaringan strategik antarabangsa baharu**  
-Meluaskan jaringan bersama Negara Asia Tenggara

**Peningkatan pelajar antarabangsa peringkat Pro-Siswazah dan Pasca Siswazah**

**I. Penawaran kadar yuran istimewa kepada pelajar Palestin.**  
**II. Memberi pengurangan yuran pengajian 30% (sensus peringkat) bagi semester pertama.**  
**III. Penawaran pengurangan yuran untuk semester seterusnya jika mencapai GPA 3.7 ke atas (bagi UG) atau sekurang-kurangnya dua ISI/SCOPUS setahun (bagi PG).**

**Penubuhan pusat pembelajaran luar negara - Program Pesisir di Vietnam, China dan Sumatera**

**Mentoring Puncak Pembelajaran dari luar negara di UTeM**  
a. China Malaysia Institute of Technology, kerjasama UTeM Education China  
b. TVET Centre, Huawei Training dan Microsoft Test Lab di UTeM kerjasama Shenzhen Polytechnic China

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UNIVERSITY TEKNOLOGI MALAYSIA

## Apa peranan Pensyarah bagi memperkasa TVET ? ?





**i. Penawaran program akademik yang menepati kehendak IR4.0, memenuhi keperluan industri dan pendidikan tinggi TVET negara.**  
a. Dua program teknologi baharu 2019: Ijazah Sarjana Muda Teknologi Kimpalan dan Pemesinan Industri  
b. Semakan semula program Pasca Siswazah yang tidak mendapat sambutan  
c. Semakan semula kandungan Program Diploma supaya selari dengan kehendak IR4.0, keperluan industri dan pendidikan TVET.

**ii. Pengambilan lepasan DVM/DKM untuk program baharu Teknologi**  
**iii. University Revolution Teaching Factory (URTF)**

**Expected Outcomes: TVET under 11th. Malaysia Plan**



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## Edu-Pelancongan : Peranan kita ?




- ✓ Hasrat Kementerian untuk menjadikan UTeM sebagai pusat edu-pelancongan pertama di negeri Melaka dan ikon pelancongan yang unik selari dengan Negeri Melaka bandaraya bersejarah, selain tarikan baharu bagi Tahun Melawat Melaka 2019;
- ✓ Pusat ini diletakkan di bawah pentadbiran pejabat TNCPI;
- ✓ Menyediakan pakej - pakej pelancongan termasuk pelbagai jenis aktiviti seperti kem keusahawanan, robotik, ICT, programming, kaunseling, motivasi, lawatan sekitar kampus, negeri Melaka dan lain-lain lagi.



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### Perbandingan Peruntukan dan Perbelanjaan Universiti pada Tahun 2018

- **Geran Mengurus dari Kerajaan : RM 235.74 juta**
- **Bajet Mengurus UTeM : RM 303.08 juta**
- **Defisit : RM 67.34 juta (22.2 %)**

**UTeM perlu menjana pendapatan sendiri bagi menampung perbelanjaan mengurus... apa peranan kita sebagai pensyarah bagi aktiviti penajaan pendapatan ?**

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